

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 139983

TO: Terra Gibbs

Location: REM-2D10/2C18

Art Unit: 1635

Thursday, December 09, 2004 Case Serial Number: 09/661658 From: Paul Schulwitz

Location: Biotech-Chem Library

REM-1A65

Phone: (571)272-2527

paul.schulwitz@uspto.gov

Search Notes

Examiner Gibbs,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz Technical Information Specialist STIC Biotech/Chem Library (571)272-2527



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SCORE OVER LENGTH SEARCHES

Attached is a score over length search. This search was developed to overcome limitations in most standard search systems which favor large sequences with high scoring, but lesser overall identity over smaller sequences with higher overall identity. This search is especially useful for relatively small nucleic acid or polypeptide target sequences (antisense, fragments, probes, primers, RNAi, epitopes, haptens, etc.) claimed functionally via a form of hybridization and/or identity language and having defined upper and lower polynucleotide and or polypeptide length limits.

The score over length search is performed by first running the query sequence using examiner-specified identity and polynucleotide or protein length limit parameters, and saving 65,000 hits and 0 alignments from each desired database. The resulting output is reformatted using a Microsoft Word macro and is imported into Excel. The summary table data are then sorted by the ratio of score of each hit sequence divided by its length and the accession numbers for all hits below the examiner's desired score over length parameters are deleted. The remaining accession numbers are used to pull the corresponding sequences from the databases into subdatabases enriched for good hits and the query sequence is re-run against these subdatabases to yield the final results.

The score ov	ver length	cutoff for	this sea	arch is	
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Examiner Please Note: This cover sheet should be included when submitting results to be scanned.

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Schulwitz, Paul

From:

Gibbs, Terra

Sent:

Wednesday, December 01, 2004 11:00 AM

To: Schulwitz, Paul

Subject:

Sequence search request...

Hi Paul,

I have another request for a score over length search:

I need a length limited nucleotide sequence search of SEQ ID NO:2 in USSN 09661658, where the returns are rank ordered based on the score over length/ratio as we've discussed. I need the lengths limited to hits between 8 and 100 nucleotides, and I'll take as many hits as you can import into excel (64,000?), and alignments for anything above .75 on the above ratio. Hope this is clear, please call me if it's not. I also need the interference databases searched.

Terra Cotta Gibbs, Ph.D. Art Unit 1635 Remsen Building 2D10 Mailbox 2C18 571-272-0758

12/2 10-16

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AC AAL4
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DT 25-S
XX Regu
XX Regu
XW Regu
XW Gene
XX Unid
XX Unid
XX Unid
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FT misc
FT misc
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Matches 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays the detecting the presence of ligands or activation of an effector of
                             misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 82 BP; 24 A; 21 C; 16 G; 0 T; 21 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        therapy. The present sequence is exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_binding
                                                                                     misc_binding
                                                                                                                        Unidentified
                                                                                                                                               gene
                                                                                                                                                          Regulatable catalytically active nucleic acid; RCANA; ribozyme;
                                                                                                                                                                                 Regulatable,
                                                                                                                                                                                                         25-SEP-2002
                                                                                                                                                                                                                               AAL43090;
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                                                 stem_loop
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                                                                                                                                              therapy;
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                                                                                                                                                                                                                                                     standard; RNA; 82
                                                                                                                                                                                                                                                                                                                           GCCCTTGGCAGATAAATGCCTA 118
                                                                                                                                                                                                                                                                                                                                                             UAAACGGGGAACCUCUCUAGUAGACAAUCCCGUGCUAAAUUAUACCAGCAUCGUCUUGAU
                                                                                                                                                                                                                                                                                                                                                                                 TAMACGGGGAACCTCTCTAGTAGACAATCCCGTGCTAAATTATACCAGCATCGTCTTGAT
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                                                                                                                                                                                                                                                                                                                GCCCUUGGCAGAUAAAUGCCUA 82
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                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                catalytically active nucleic acid #22
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                              /*tag=
29. .33
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/*tag= c
/bound_moiety= "binds nucleotides 8-4 of itself"
                                                     /bound_moiety=
                                                                                                 Location/Qualifiers
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Pred. No. 1.8e
21; Mismatches
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T4 theophylline-dependent intron -based RCANA

GPITH1P6.133

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RESULT 4
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Best Local S
Matches 61
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      23-SEP-2004
                                                                                                                                                                                                                           New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                 Ellington AD, Hesselberth J, Davidson E, Cox JC, Reidel T;
                                                                                                                                                                                                                                                                                                                                                                   misc_binding
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                                ADQ96971 standard;
                                                                                                                                               Sequence 82 BP;
                                                                                                                                                                                                         Example
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                                                                                                                            Similarity
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                                                                          GCCCTTGGCAGATAAATGCCTA 118
                                                                                           UAAACGGGGAACCUCUCUAGUAGACAAUCCCGUGCUAAAUUAUACCAGCAUCGUCUUGAU
                                                                                                       TAAACGGGGAACCTCTCTAGTAGACAATCCCGTGCTAAATTATACCAGCATCGTCTTGAT
                                                                                                                                                                                                        Fig 25B;
                                                                                                                     Conservative
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      (first
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/bound moiety=
78. .79
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                                                                                                                                              24 A; 21 C; 16 G; 0 T;
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                                RNA;
      entry)
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21; Mismatches
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15-JUN-2000; 2000US-0212097P.
14-SEP-2000; 2000US-006661658.
20-SEP-2000; 2000US-00666870.
14-JUN-2001; 2001US-00883119.
24-SEP-2001; 2001US-0324715P.
                                                                                                                                                                                                                                                                                                                                                                               misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therapy; industrial biosynthesis; bioremediation; bacteriophage T4;
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                            Ellington
                                                                     (RIED/)
(WILS/)
                                                                                         (DAVI/)
                                                                                                              (ROBE/)
(SOOT/)
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                                                                                                                                                      (ELLI/)
2004-560517/54.
                                               SOOTER L.
DAVIDSON E.
CCX J C.
RIBDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                                      ELLINGTON A
                                                                                                                      ROBERTSON M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthase; self-splicing intron.
                   Cox
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                   Hesselberth J,
ox JC, Riedel T,
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78. .79
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Keefe AD;
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

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RESULT 5
ADQ96997
ID ADQ9
XX
AC ADQ9
                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a regulatable, catalytically active nucleic acid (RCANA) segment comprising an effector domain and a nucleic acid catalytic domain and in which one or more critical catalytic residues of the nucleic acid catalytic domain in which one or more critical catalytic residues of the nucleic acid catalytic domain are regulated by an effector that interacts with the catalytic domain are regulated by an effector that interacts with the catalytic domain are regulated by an effector that interacts with the catalytic domain are regulated by an effector that interacts with the catalytic domain are feetor domain involving randomising at least one uncleic acid so that interact with the catalytic target of the catalytic comprising a gene, a catalytic domain, detection of a target using a RCANA comprising the catalytic domain, detection of a target using a RCANA, and detecting an RCANA (involving providing a RCANA, and detecting an RCANA (involving inclusions that the function of a target using a RCANA, and involving inclusions that the actalytic activity, selecting an RCANA, and detecting an RCANA (involving inclusions that the actalytic activity of the nucleic acid upon apposure of the host cell to catalytic activity of the nucleic acid upon apposure of the bost cell to catalytic activity of the nucleic acid upon apposure of the bost cell to catalytic activity of the respilatory domain with an effector the activity of the coding potential, and a regulatory domain which moves inserting product in the activity of the coding potential, and a regulatory domain which make a seatalytic domain, the product is fully inhibited or is increased compared to a normal control of the product is product as product to the coding potential, and a regulatory domain which the effector of the gene. The effector is 
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Best Local :
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                                  ADQ96997 standard; RNA; 82 BP
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                                                                                                                                                                                                            61,
                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                        GCCCUUGGCAGAUAAAUGCCUA 82
                                                                                                                                                         GCCCTTGGCAGATAAATGCCTA 118
                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                 16 G; 0 T; 21 U; 0 Other;
                                                                                                                                                                                                                                                                               Score 82; DB 1;
Pred. No. 1.8e-05;
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ADQ96997;

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Novel regulatable, catalytically active nucleic acid comprising effector
                  WPI; 2004-560517/54
                                   Bllington AD, Hesselberth J,
Davidson E, Cox JC, Riedel T,
                                                                                                                                                   (HESS/)
                                                                                                                                                                                         15-JUN-2000; 2000US-0212097P.
14-SEP-2000; 2000US-00661658.
20-SEP-2000; 2000US-00666670.
14-JUN-2001; 2001US-00883119.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enterobacteria phage T4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aptamer; effector domain; nucleic acid catalyst domain; gene therapy; industrial blosynthesis; bloremediation; bacteriophage T4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RCANA; catalytically active regulatable nucleic acid; ss; ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Theophylline-dependent group I intron RCANA Thip6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-SEP-2004
                                                                                                                                                                                24-SEP-2001;
                                                                                              (RIED/
                                                                                                      (COXJ/)
                                                                                                              (DAVI/)
                                                                                                                                 (ROBE/)
                                                                                                                                           (/MOHT)
                                                             DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                HESSELBERTH
THOMPSON K.
ROBERTSON M
                                                                                                                                                            ELLINGTON A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthase; self-splicing intron.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                               2001US-0324715P
                                                                                                                                                                                                                                       2002US-00254568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /bound moiety= "Bases 8-4 of the present sequence" 34. .35
                                                                                                                                                                                                                                                                                                                  /bound moiety= "Base 41 of the present sequence" 78...79
                                                                                                                                                                                                                                                                                                                                                                                                                        /bound_moiety= "Base
45. .46
                                                                                                                                                                                                                                                                                                                                                                                            /bound moiety= "Bases 68-67 of the present sequence" 48...6\overline{2}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                    /*tag= i
                                                                                                                                                                                                                                                                                                                                                    /bound_moiety=
                                                                                                                                                                                                                                                                                                                                                                                  /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                           bound_moiety= "Bases 78-79 of the present sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /bound
                                                                                                                                                                                                                                                                                              bound_moiety= "Bases 35-34 of the present sequence"
                                                                                                                                                                                                                                                                                                                                                                  /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                *tag=
                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       moiety= "Bases 33-29 of the present sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ρ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ժ
                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                   g
                                     Thompson Wilson
                                                                                                                                                                                                                                                                                                                                                       "Bases 46-45 of the present sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                  72 of the present sequence'
                                     O S
                                     Robertson
Cload ST,
                                     MP, Sooter L;
Keefe AD;
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cc acid catalyst have been randomised, where the kinetic parameters of the catalytic domain are regulated by an effector that interacts with the effector domain. Also included are a nucleic acid comprising a gene, a catalytic and an effector domain involving randomising at least one uncleic acids to catalyte domain of a catalytically active nucleic acid within the gene (where the presence of an effector causes the nucleic acids that interact with the catalytic target of the catalytic and an effector molecule to the nucleic acids and interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acids and isolating those nucleic acids that interact with the catalytic target of the catalytic comain, adding an effector molecule to the nucleic acids and isolating those nucleic acids is a position of a target using a RCANA emodifying a target with the catalytic target of the catalytic comain), detection of a target using a RCANA and detecting a target using a RCANA, involving isolating a RCANA, creating a CANA, and detecting an RCANA, creating a CANA, and the cities and catalytic activity, of the nucleic acid upon exposure of the host cell to catalytic activity of the nucleic acid upon exposure of the host cell to respend to the product or regulates the production of a product in a cell (by gene therapy) which involves inserting into a gene that cell to recognise an effector that alters the function of the product in the product or is the product or recognises a catalytic domain, that modifies a transcript to alter its coding potential, and a regulatory domain which recognises an effector. The catalytic domain, that modifies the activity of the catalytic domain, that modifies the activity of the catalytic domain, that modifies the activity of the product. The construction of the product is fully inhibited or acid the modern of the effector. The product is produced to a machanous thereby regulating the regulation of the product is characterially inhibited according to the conce
                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                          Sequence 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a regulatable, catalytically active nucleic a (RCANA) segment comprising an effector domain and a nucleic acid catal domain in which one or more critical catalytic residues of the nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                        splicing intron.
                                                                                                                                                                                                                                                                           Local
                                                          97
61
                                                                                                                                                                                                                                                    61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , and catalyst domain which comprises randomized catalytic residues regulated by effector that interacts with effector domain.
                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                     GCCCTTGGCAGATAAATGCCTA 118
                                                                                                                                                                                   TAAACGGGGAACCTCTCTAGTAGACAATCCCGTGCTAAATTATACCAGCATCGTCTTGAT
                                                                                                                                                                                                                                                                                                                                                                             BP;
                                                                                                                                                                                                                                                                                                                                                                          24 A;
                                                                                                                                                                                                                                                                               62.6%;
                                                                                                                                                                                                                                                                                                                                                                             21
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                                                                                                                                                                                                                                                 21;
                                                                                                                                                                                                                                                                                                                                                                          16 G; O T;
                                                                                                                                                                                                                                                                                  Score 82;
Pred. No.
                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                          21 U;
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                                                                                                                                                                                                                                                                               8e-05;
                                                                                                                                                                                                                                                                                                                                                                             0 Other;
                                                                                                                                                                                                                                                                                                            Length 82;
                                                                                                                                                                                                                                                    Indels
                                                                                                                            60
                                                                                                                                                                                          96
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RESULT 6 ABN83053

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The sequence represents a portion of the P6 region of the Group I ribozyme joined to the anti-theophylline aptamer by a short randomised region to generate a pool of aptazymes of the presents invention. The invention relates to a novel aptazyme construct comprising a regulatable group I intron aptamer oligonucleotide sequence having an allosterically regulatable regulatory domain, where the kinetic parameters of the aptazyme on a target gene vary in response to the interaction of an allosteric effector molecule with the regulatory domain, and the intron
                                                                                                                                                                                            Ellington AD, He
                                                                                                                                                                                                                                                                                                                                                          misc_binding
                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                      misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unidentified
                                                                                                Example 2; Fig
                                                                                                                                regulatable
domain, and
                                                                                                                                            Aptazyme construct for detecting the presence of ligands, regulatable Group I intron aptamer oligonucleotide with a
                                                                                                                                                                          WPI; 2002-090203/12.
                                                                                                                                                                                                                                                   15-JUN-2000; 2000US-00661658
                                                                                                                                                                                                                                                                      15-JUN-2001; 2001WO-US019119.
                                                                                                                                                                                                                                                                                                                                                                                                                                            stem_loop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            stem_loop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aptazyme; regulatable; aptamer; luciferase; cyclic AMP; ss; group I ribozyme; anti-theophylline; aptazyme pool.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Group I P6 aptazyme pool.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABN83053 standard; RNA; 82
                                                                                                                                                                                                                             (TEXA ) UNIV TEXAS.
                                                                                                                               Group I intron aptamer oligonucleot modulates their kinetic parameters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                               3; 42pp;
                                                                                                                                                                                                         Hesselberth J,
                                                                                                                                                                                                                                                                                                                                                                                                                                     48. .62
                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
67. .68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /bound_n
14. .24
                                                                                                                                                                                                                                                                                                                                                          /bound_moiety=
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/bound_moiety=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                    bound_moiety= "Bases 35-34"
                                                                                                                                                                                                                                                                                                                                                                               *tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /bound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   *tag=
                                                                                                                                                                                               Reidel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      moiety=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          moiety= "Bases 33-28"
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                                                                                               English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       may be repeated 1-4 times"
                                                                                                                                                                                                         Marshall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Bases 79-78"
                                                                                                                                                                                                                                                                                                                                                                    "Base may be repeated 1-4 times"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Bases 9-4"
                                                                                                                                                                                                                                                                                                                                                                                                     "Bases 46-45"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Bases 68-67"
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                                                                                                                                                                                                          Robertson
                                                                                                                                 in response
                                                                                                                                            a regulatory
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  Query Match
Best Local Similarity 100
Matches 76; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                The present invention relates to regulatable, catalytically active nucleic acids (RCANAs) which are regulated by polypeptides. These are useful for regulating gene expression, in assays for detecting the presence of ligands, for activation of an effector of RCANA, and in gene therapy. The present sequence is an oligonucleotide used in the construction of an RCANA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               splicing reaction occurs in vitro. The aptazyme is useful: (1) in assays to detect the presence of ligands or to detect activation of an aptazyme by an effector; (2) in the identification, isolation and enhancement of allosteric effectors and of the allosterically regulatable aptazymes with which they interact; (3) to activate or repress a reporter gene (e.g. luciferase) containing an engineered intron in response to an endogenous activator; and (4) to monitor intracellular levels of proteins or small
                                                                                                                                                                                                                 New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                                                  Ellington AD, Hesselberth J, I
Davidson E, Cox JC, Reidel T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Regulatable, catalytically active nucleic acid construction oligo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAL43048 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 82 BP; 23 A; 21 C; 16 G; 0 T;
                                                       Sequence 94
                                                                                                                                                                             Example 5; Page 68; 126pp; English.
                                                                                                                                                                                                                                                                          WPI; 2002-122216/16.
                                                                                                                                                                                                                                                                                                                                                                    15-JUN-2000; 2000US-0212097P
                                                                                                                                                                                                                                                                                                                                                                                              14-JUN-2001; 2001WO-US019302
                                                                                                                                                                                                                                                                                                                                                                                                                         20-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200196559-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Regulatable catalytically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     molecules such as cyclic AMP
                                                                                                                                                                                                                                                                                                                                          (TEXA ) UNIV TEXAS SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCCUUGGCAGNUAAAUGCCUA 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCTTGGCAGATAAATGCCTA 118
                                                       вP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dв
                                                       27
                                                       A; 23 C;
58.0%; Scc.
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     active
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20;
    Score 76; DB; Pred. No. 6.1:
                                                         17 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 80; DB 1;
Pred. No. 2.7e-05;
0; Mismatches 2
                                                                                                                                                                                                                                                                                                                 Marshall K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid; RCANA;
                                                         27 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 U;
                DB 1; Le
                                                       0 U; 0
                                                                                                                                                                                                                                                                                                                 Robertson
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                             Length 94;
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                                                          Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Other;
     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                 Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ribozyme;
                                                                                                                                                                                                                                                                                                                 Sooter
     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>,</u>
     Сарв
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S

GCCTGAGTATAAGGTGACTTATACTTGTAATCTATCTAAACGGGGAACCTCTCTAGTAGA 60

Query Match Best Local S Matches 76

Similarity

58.0%;

Score 76; pred. No. 0; Mismatches

DB 1; L 6.1e-05; 0

Length 94

Indels

٥,

Gaps

76;

Conservative

Sequence 94

BP; 27

A; 23 C; 17 G; 27 T; 0 U; 0 Other;

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RESULT 8
ADA39564
ADA3964
ADA39564
ADA39664
ADA3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        吊
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                                                                The present invention describes a method for regulating production of a product in a cell. The method comprises inserting a regulatable CC catalytically active nucleic acid (RCANA) into a gene that produces the CC product or regulates the production of the product in the cell, where the CC RCANA comprises a catalytic domain which modifies a transcript to alter CC its coding potential and a regulatory domain that recognises an effector that alters the function of the catalytic domain, and contacting the CC regulatory domain with an effector to regulate production of the product. CC Also described: (1) regulating a biological pathway in cell, or CC creening a population of cells for a cell that produces a bioproduct. CC The methods are useful for regulating a biological pathway in cell, or regulating production of a product in a cell. The RCANAs are useful as CC regulating production of a product in a cell. The RCANAs are useful as CC regulating production of a product in a cell. The RCANAs are useful as CC regulating or disfavouring production of genes in a metabolic CC pathway, or as regulated selectable markers to increase a selective CC pathway, or as regulated selectable markers to increase a selective complete the construction of an RCANA, which is used in an example from the construction of an RCANA, which is used in an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Regulating production of a product in a cell, comprises inserting a regulatable catalytically active nucleic acid into a gene that produces the product or regulates the production of the product in the cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADA39564 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-354657/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wilson C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   regulatable catalytically active nucleic acid; RCANA; catalytic domain; regulation; screening; gene therapy; biological pathway regulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADA39564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 5; Page 70; 128pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ARCH-) ARCHEMIX CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-SEP-2001; 2001US-0324715P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-SEP-2002; 2002WO-US030458.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 regulatory element;
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The invention relates to a regulatable, catalytically active nucleic acid (RCANA) segment comprising an effector domain and a nucleic acid catalyst domain in which one or more critical catalytic residues of the nucleic acid catalytic have been randomised, where the kinetic parameters of the catalytic domain are regulated by an effector that interacts with the effector domain. Also included are a nucleic acid comprising a gene, a RCANA inserted within the gene (where the presence of an effector causes the nucleic acid to catalyse a reaction), isolating an RCANA (comprising a catalytic and an effector domain involving randomising at least one nucleotide in the catalytic domain of a catalytically active nucleic acid to create a nucleic acid gool, removing from the nucleic acid gool those nucleic acids that interact with the catalytic target of the catalytic
                                                                                                                                                                                                       Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.
                                                                                                                                                                                                                                                               WPI; 2004-560517/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUN-2000; 2000US-0212097P.
14-SEP-2000; 2000US-00661658.
20-SEP-2000; 2000US-00666870.
14-JUN-2001; 2001US-00883119.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enterobacteria Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therapy; industrial biosynthesis; bioremediation; bacteriophage T4;
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RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ELLINGTON A
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                                                                                                                                                                                                                                                                             R. Cox JC,
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                                                                                                                                                                               SEQ ID NO 20; 78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthase; self-splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-0324715P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-00254568
                                                                                                                                                                                                                                                                                      Hesselberth J, Tox JC, Riedel T,
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[, Wilson
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                                                                                                                                                                                                                                                                                        Robertson Cload ST,
                                                                                                                                                                                                                                                                                        MP, Sooter L;
Keefe AD;
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Contesting the regulatory domain with an effector thereby regulating the activity of the catalytic domain of the RCANA. The production of the product. The concentration of the effector modulates the activity of the catalytic domain of the RCANA. The production of the product is fully inhibited or is increased compared to a normal control collevel, or is partially inhibited according to the concentration of the ceffector. The RCANA blocks or activates expression of the gene. The groduct is product, where it accesses feedback inhibitor of the ceffector. The product is produced in a metabolic pathway that is being compared to the gene. The effector or the product is an intermediate in a ceffector is an end product of a biosynthetic process. The effector or the product is chosen from protein, enzyme, protein pharmaceutical, ceffector is an end product of a biosynthetic process. The drug is chosen from antibiotics, anticancer drugs, antifungals, cholesterol-ceffectoring drugs, and immunosuppressants. The RCANA is useful for regulating a biological pathway in a cell, for screening a population of cells for a cell that produces a bioproduct, for modulating expression of colligonucleotide used to mutate the catalytic region of an RCANA based on the bacteriophage T4 thymidylate synthase gene self-splicing intron.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             specific modification and modifying the target under conditions that cause a RCANA-specific activity), selecting an RCANA and detecting an RCANA (involving isolating an RCANA, creating a CONSTRUCT in which the nucleic acid is in position to regulate the expression of a reporter gene, introducing the construct into a host cell and measuring the catalytic activity of the nucleic acid upon exposure of the host cell to the effector. The RCANA is useful for regulating production of a product in a cell (by gene therapy) which involves inserting into a gene that produces the product or regulates the production of the product in the cell an RCANA which comprises a catalytic domain, that modifies a transcript to alter its coding potential, and a regulatory domain which recognises an effector that alters the function of the catalytic domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                catalytic domain), detection of a target using a RCANA, modifying a target using a RCANA (involving providing a RCANA capable of target-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 domain, adding an effector molecule to the nucleic acids and isolating those nucleic acids that interact with the catalytic target of the
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Sequence 94 BP; 27 A; 23 C; 17 G; 27 T; 0 U; 0 Other;

Matches Query Match Best Local Similarity Conservative 100.0%; 58.0%; Score 76; Pred. No. <u>,,</u> Mismatches DB 1; L Length 94 Indels 0, Gaps 0

60 6

RESULT 10
AAL43089
ID AAL43
XX AAL43
AC AAL43
AC AAL43
AC AAL43
XX 25-SE
XX Regul
XX Regul
XX Regul
XX Gene
XX Unide
XX Unide AAL43089 standard; RNA; 45

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Regulatable, catalytically active nucleic acid #21

25-SEP-2002

(first entry)

Regulatable catalytically active nucleic acid; RCANA; ribozyme; therapy;

Unidentified

misc_binding Location/Qualifiers

/*tag= a /bound_moiety= "binds nucleotides 33-29 of itself"

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                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                  Matches
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                                                                                                                          RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therap industrial biosynthesis; bioremediation; bacteriophage T4;
                                                                                                                                                                                                                                                                                                                                                                         Sequence 45
                                                                                                                                                                                                                                                                                                                                                                                              therapy. The present sequence is exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
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misc_binding
                                                                                   Synthetic
                                                                                              Enterobacteria
                                                                                                                thymidylate
                                                                                                                                                                   Theophylline-dependent group I intron RCANA B11.
                                                                                                                                                                                                                                  ADQ96996 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 5; Fig
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                   stem_loop
                                                    misc_binding
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                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a AD, ...
R. Cox JC,
                                                                                                                                                                                                                                                                                                   TAAACGGGGAACCTCTCTAGTAGACAATCCCGTGCTAAAT
                                                                                                                                                                                                                                                                                        UAAACGGGGAACCUCUCUAGUAGACAAUCCCGUGCUAAAU
                                                                                                                synthase; self-splicing intron.
                                                                                                                                                                                                                                                                                                                                                                         BP; 14 A; 12 C;
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                                                                                           phage T4
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34. .42
/*tag= d
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/*tag=
29. .33
/*tag=
 /bound_moiety= "Bases 33-29
14. .24
/*tag= b
29. .33
                                                             Location/Qualifiers
                                          /*tag=
                                                                                                                                                                                                                                  RNA;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                         T; 10 U;
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20-SEP-2000;
14-JUN-2001;
24-SEP-2001;
Ellington AD, neu-
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                                                       WILS/)
                                                                  RIED/)
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                                                                                              SOOT/)
                                SOOTER L.
DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                          ELLINGTON A
HESSELBERTH
                                                                                                        ROBERTSON M
                                                                                                                 THOMPSON
                                                                                                                                                       ); 2000US-0212097P.

); 2000US-00661658.

); 2000US-00666870.

); 2001US-00883119.

; 2001US-0324715P.
      Hesselberth J,
ox JC, Riedel T,
                                                                                                                                                                                                                                                                               /bound moiety= "Bases 34. .42 /*tag= d
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                                                                                                                            <u>4</u> 9
      Thompson F, Wilson
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      Robertson
Cload ST,
                                                                                                                                                                                                                                                                                                     the
                                                                                                                                                                                                                                                                                                    present sequence"
       Keefe
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

Example 5; SEQ ID NO 64; 78pp; English.

CC (RCANA) segment comprising an effector domain and a nucleic acid domain in which one or more critical catalytic residues of the nucleic catalytic domain are regulated by an effector that interacts with the catalytic domain. Also included are a nucleic acid comprising a gene, a catalytic domain. Also included are a nucleic acid comprising a gene, a catalytic domain. Also included are a nucleic acid comprising a gene, a catalytic and an effector domain involving randomising at least one concluded in the catalytic domain involving randomising at least one conclude in the catalytic domain of a catalytic acid pool, removing from the nucleic acid pool, removing from the nucleic acid gool, removing from the nucleic acid substitutes and isolating at catalytic domain, adding an effector molecule to the nucleic acids that interact with the catalytic target of the catalytic specific acids that interact with the catalytic target of the catalytic cataget using a RCANA (involving providing a RCANA, capable of target using a RCANA, specific acidityly), selecting an RCANA, and detecting an RCANA, capable of target catalytic activity of the nucleic acid acid so in position to regulate the expression of a reporter catalytic activity of the nucleic acid modification and modifying the target under conditions that the catalytic activity of the nucleic acid acid so in position to regulate the expression of a reporter catalytic activity of the nucleic acid upon exposure of the host cell to catalytic activity of the nucleic acid upon exposure of the host cell to catalytic activity of the nucleic acid upon exposure of the host cell to conscit the product or regulates the production of a product or resolutes and effector that alters the function of the product in the catalytic domain, which comprises a catalytic domain, that modifies a challed or is increased compared to a normal control level, or is partially inhibited according to the concentration of the

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RESULT 12
AAA98320
ID AAA98
XX AAA98
XX AAA98
XX AAA98
XX RNA a
XX RNA a
XX RNA a
XX RNA a
XX Epina
XX Dide
PN DE199
XX D199
XX D2-MP
XX D2-MP
XX D2-MP
XX WPI;
XX This
CC Tract
CC Tract
CC Tract
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CC Compo
CC free
CC free
CC Compo
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CC Compo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 31; Conser
               This invention describes a novel test system for detecting a splice reaction comprising at least 1 optionally similar immobilized nucleic acid (I) capable of splicing, at least 1 gfree detection system, at least a composition containing a splice component, a suitable detection probe, and if necessary other means of help. The method is used to identify substances, which are effective as functiones, herbicides, pesticides and/or insecticides. The method can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNA aptamer; splice reaction; detection; fungicide; herbicide; cancer; pesticide; insecticide; diagnosis; viral disease; Grave's disease; spinal muscular atrophy; beta-thalassemia; ds.
                                                                                                                                                                                                                       Disclosure; Page 10; 36pp; German.
                                                                                                                                                                                                                                                                           insecticides or
                                                                                                                                                                                                                                                                                                Novel test system for detecting substances effective as fungicion
                                                                                                                                                                                                                                                                                                                                                                                                                            Huels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 45 BP; 14 A; 12 C; 9 G; 0 T; 10 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            effector. The RCANA blocks or activates expression of the gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           splicing
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                                                                                                                                                                                                                                                                                                                                                                                                                            Simandi C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
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                                                                                                                                                                                                                                                                           disease.
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ides, herbicides, pesticides
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Matches 24
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07-OCT-1993;
22-FEB-1994;
25-APR-1994;
                                                                                                                                                                                                                                                                                                      Gold L,
Polisky
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               muscular atrophy, beta-thalassemia, cancer caused by c-erb oncogene, hepatitis {\tt C} infection and/or herpes simplex virus infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 40
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16-JAN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ89182 standard;
                                                                                                                                                                                                 Identifying nucleic acid ligands increased affinity nucleic acids
                                                                                                                                                                                                                                                                WPI; 1995-123436/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-MAR-1995
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                                                                                                                                                                                                                                                                                                                                                                   (NEXA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73
                                                                                                                                                                                                                                                                                                                                                                   NEXAGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                           Pieken W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGUGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG
                                                                                                                                                             Fig 49; 251pp; English
                                                                                                                                                                                                                                                                                                      Jayasena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 9 A; 11 C; 9 G; 0 T; 11 U; 0 Other;
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(first en
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ligand; thrombin; elastase; theophylline; caffei l; diagnosis; vascular endothelial growth factor; RNA; DNA; ss.
                                                                                                                                                                                                                                                                                                                                                                                                       93US-00117991.
93US-00134028.
94US-00199507.
94US-00233012.
94US-00234997.
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                                                                                                                                                                                                                                                                                                        Tasset D, Janjic N, Kirschenheuter a S, Biesecker G, Smith D, Jenison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
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                                                                                                                                                                                                     for target molecules - from a candidate mixt.
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No. 1
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                                                                                                                                                                                                       by partitioning and amplifying.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              caffeine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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The sequences given in AAQ89181-88 represent nucleic acid ligands to theophylline. These ligands were identified using the method of the invention. The method comprises contacting a candidate mixture with the target molecule (i.e. theophylline) where the nucleic acids which have a increased affinity to the target relative to the candidate mixture can k partitioned from the remainder of the candidate mixture. The increased

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26-MAY-1998;
04-JAN-1999;
15-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               candidate mixture and the isolated nucleic acids are amplified to yield a ligand-enriched mixture of nucleic acids, in which the nucleic acid ligands can be identified. The isolated ligands may be used as pharmaceuticals, diagnostic agents and in gene therapy. The ligands may be RNA or DNA molecules. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                           The present sequence is that of a short RNA aptamer which is inserted into the 5' untranslated region of the Epo gene in the pVETIMEpo vector. This aptamer is designed to bind specifically and with high affinity to theophylline, a soluble, cell permeable, non toxic ligand, and will result in the translational control of Epo protein expression being specifically induced and regulated following ligand treatment and binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Johnston JC,
Dubensky TW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA aptamer; inserted; Epo gene; pVETLMEpo vector; bind specifically;
high affinity; theophylline; non toxic ligand; translational control;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Short RNA aptamer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX90663 standard;
                                                                                                                                                                                                  Sequence 38 BP; 8 A; 11 C; 9 G; 0 T; 10 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-444391/37.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        feline immunodeficiency virus vectors containing heterologous uences for gene therapy in transformed hosts.
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                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                         21A; Page 137; 170pp; English.
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AGUGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG 34
                                                   AATTATACCAGCATCGTCTTGATGCCCTTGGCAG 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        expression;
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Yee J;
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98US-0086825P.
99US-0114955P.
99US-00231235.
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                                                                                               Score 30.8; D
Pred. No. 1.4;
9; Mismatches
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Pred. No. 1
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RESULT 15
ANG89171:
ANG89171
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ANG89177
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ANG8917
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ANG8917
XX
ANG8917
XX

PAG8917
PAG8
                                             This sequence respresents a nucleic acid ligand to theophylline. This cligand was construct from the conserved domains of larger theophylline ligands and a limited flanking sequence. These ligands were identified to using the method of the invention. The method comprises contacting a candidate mixture with the target molecule (i.e. theophylline) where the nucleic acids which have an increased affinity to the target relative to the candidate mixture can be partitioned from the remainder of the increased affinity nucleic acids are partitioned from the remainder of the candidate mixture and the isolated nucleic acids are amplified to yield a ligand-enriched mixture of nucleic acids, in which the nucleic acid ligands can be identified. The isolated ligands may be used as pharmaceuticals, diagnostic agents and in gene therapy. The ligands may be RNA or DNA molecules. (Updated on 25-MAR-2003 to
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07-OCT-1993;
22-FEB-1994;
25-APR-1994;
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Polisky
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16-JAN-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 26; Fig 52; 251pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying nucleic acid ligands increased affinity nucleic acids
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3, Jayasena
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94US-00233012.
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Query Match Best Local S Matches 22

Local Similarity nes 22; Conserv

23.2%; ilarity 68.8%; Conservative

9

Mismatches

Indels

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Score 30.4; Pred. No. 1.

DB 1; Length 0 Other;

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The sequences given in AAQ89117-29 represent nucleic acid ligands to theophylline. These ligands were identified using the method of the invention. The method comprises contacting a candidate mixture with the target molecule (i.e. theophylline) where the nucleic acids which have a increased affinity to the target relative to the candidate mixture can b partitioned from the remainder of the candidate mixture. The increased affinity nucleic acids are partitioned from the remainder of the candidate mixture and the isolated nucleic acids are amplified to yield ligand-enriched mixture of nucleic acids, in which the nucleic acid ligands can be identified. The isolated ligands may be used as pharmaceuticals, diagnostic agents and in gene therapy. The ligands may be RNA or DNA molecules. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                    08-SEP-1993;
07-OCT-1993;
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gene therapy; RNA; DNA; ss.
                                                                                                                                                                                            Identifying nucleic acid ligands for target molecules - by partitioning increased affinity nucleic acids from a candidate mixt. and amplifying.
                                                                                                                                                                                                                                                                                                                         28-APR-1994
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14-NOV-1995
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                                                                                                                                                                                                                                                          Jayasena
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 affinity RNA molecule, TCT8-4,
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93US-00134028.
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25. .33
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Best Local S
Matches 23
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Best Local S
Matches 22
                                  ADA39562;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to regulatable, catalytically active nucleic acids (RCANAs) which are regulated by polypeptides. These are useful for regulating gene expression, in assays for detecting the presence of ligands, for activation of an effector of RCANA, and in gene presence of ligands for activation of an effector of RCANA, and in gene presence of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the primer used in th
                                                                                                    ADA39562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ellington AD, He Davidson E, Cox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   an RCANA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 5; Page 67; 126pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-122216/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-JUN-2000; 2000US-0212097P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-JUN-2001; 2001WO-US019302.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200196559-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Regulatable catalytically active nucleic acid; RCANA; ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Regulatable,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAL43046;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAL43046 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       therapy;
                                                                                                                                                                                                                                                                                                                                    19
                                                                                                                                                                                                                                                                                                                                                                                                  23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      76 TTATACCAGCATCGTCTTGATGCCCTTGGCAG 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N
                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                    standard;
                                                                                                                                                                                                                                                                                                               TTATACTTGTAATCTATCTAAACG
                                                                                                                                                                                                                                                                      TTATACTAGTAATCTATCTAAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 9 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 8 A;
                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     catalytically active nucleic acid construction primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hesselberth J,
ox JC, Reidel T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                          17.1%;
95.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12 C; 9
                                                                                                    24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24
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                                                                                                    쁌
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                                                                                                                                                                                                                                                                                                                                                                                                                             Score 22.4;
Pred. No. 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G; 0 T; 11 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Marshall K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ed. No. 1.5;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                  24
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No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ű
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1;
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                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24;
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                                                                                                                                                                                                                                                                                                                                                                                                     0
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                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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RESULT 19
ADQ96953
ID ADQ96
XX
AC ADQ96
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AC ADQ96
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XX
CANA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a method for regulating production of a CC product in a cell. The method comprises inserting a regularable CC catalytically active nucleic acid (RCANA) into a gene that produces the product or regulates the production of the product in the cell, where the CC RCANA comprises a catalytic domain which modifies a transcript to alter its coding potential and a regulatory domain that recognises an effector that alters the function of the catalytic domain, and contacting the CC regulatory domain with an effector to regulate production of the product. CC Also described: (1) regulating a biological pathway in cell; and (2) CC Robert CC CC and the production of cells for a cell that products a bioproduct. CC regulating production of a product in a cell. The RCANAs are useful as CC regulatory elements to control the expression of genes in a metabolic pathway, or as regulated selectable markers to increase a selective CC pathway, or as regulated selectable markers to increase a selective CC pressure favouring or disfavouring production of a targeted bioproduct. CC pathway, or useful for in vitro or in vivo sensing or detection, and in gene therapy. The present sequence represents an oligonucleotide cused in the construction of an RCANA, which is used in an example from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Regulating production of a product in a cell, comprises inserting a regulatable catalytically active nucleic acid into a gene that produces the product or regulates the production of the product in the cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    regulatable catalytically active nucleic acid; RCANA; catalytic domain; regulation; screening; gene therapy; biological pathway regulation; regulatory element; metabolic pathway; ribozyme; ss.
RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therapy;
                                                                                                         RCANA GPITH1P6
                                                                                                                                                                                                                                                                                                          ADQ96953 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; Page 69; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-SEP-2001; 2001US-0324715P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003027310-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-SEP-2002; 2002WO-US030458.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RCANA construction related oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ARCH-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 TTATACTTGTAATCTATCTAAACG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TTATACTAGTAATCTATCTAAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                 (first entry)
                                                                                                     PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; 4 C; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G; 9 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 22.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No. 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO:18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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Ellington AD, Hesselberth J, Davidson E, Cox JC, Riedel T,
                                                                                         (DAVI/)
                                                                                                                                                                                                           20-SEP-2000; 2000US-00666870
14-JUN-2001; 2001US-00883119
                                                                                                                                                                                                                                    15-JUN-2000; 2000US-0212097P
14-SEP-2000; 2000US-00661658
                                                                                                                                                                                                                                                                            24-SEP-2002; 2002US-00254568
                                                                                                                                                                                                                                                                                                                                                                  Enterobacteria phage T4
                                                                                                                                                                                                                                                                                                                                                                                            industrial biosynthesis; bioremediation; PCR; primer.
                                                                                                                   (ROBE/)
                                                                                                                                                                                                 24-SEP-2001;
                                                                                                                                            (/MOHT)
                                                                                                                                                                      (ELLI/)
                                                               (WILS/)
                                                                              RIED/
                                                                                                                                                         (\SSH)
                                    ROBERTSON M I SOOTER L. SOOTER L. DAVIDSON E. CCX J C. RIEDEL T. WILSON C. CLOAD S T. KEEFE A D.
                                                                                                                                            HESSELBERTH
THOMPSON K.
                                                                                                                                                                      ELLINGTON A
                                                                                                                                                                                                 2001US-0324715P
                                                                                                                                                         4 D
 Thompson
C, Wilson
  ᠬ
 Robertson
Cload ST,
  Keefe
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

Example 5; SEQ ID NO 18; 78pp; English.

CRCANA) segment comprising an effector domain and a nucleic acid comain in which one or more critical catalytic residues of the nucleic catalytic domain in which one or more critical catalytic residues of the nucleic catalytic domain are regulated by an effector that interacts with the catalytic domain are regulated by an effector that interacts with the catalytic domain are regulated by an effector that interacts with the catalytic domain are regulated by an effector characts with the catalytic domain are regulated by an effector characts with the catalytic and an effector domain, isolating an RCANA (comprising a gene, a catalytic and an effector domain involving randomising at least one conclude that interact with the catalytically active nucleic acid to create a nucleic acid pool, removing from the nucleic acid mucleic acids that interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acids and isolating catalytic domain, adding an effector molecule to the nucleic acids and isolating catalytic domain, addition and modifying the catalytic target of the catalytic catalytic domain, appecific activity), selecting an RCANA, modifying a RCANA, (involving isolating providing a RCANA, capable of target catalytic activity), selecting an RCANA, and detecting an RCANA, creating a RCANA, (involving isolating an RCANA, creating a construct in which the catalytic acid upon exposure of the host cell to catalytic activity) which involves inserting into a gene that construct in the construct in the construct on of a reporter catalytic domain, that modifies a constructing the regulatory domain with an effector thereby regulating conduction of the product in the catalytic domain, that modifies a conduction of the product in the catalytic domain, that modifies a charactivity of the catalytic domain of the RCANA. The production of the product in the catalytic domain of the RCANA. The production of the conduction of the catalytic activity of the catalytic domain of the concentration

effector. The RCANA blocks or activates expression of the gene. The effector is the product, where it accesses feedback inhibitor of the

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RESULT 20
ADQ96938
ID ADQ96938
AC ADQ96
XX ADQ96
XX ADQ96
XX ADQ96
XX ADQ96
XX RCANA
XX RCANA
XX ADG96
XX IS-JU
PR 14-SE
PR 24-SE
XX 15-JU
PR 14-SE
PR 14-JU
PR 14-SE
PR 14-JU
PR 14-SE
PR 14-SE
PR 14-JU
PR 14-SE
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene. The product is produced in a metabolic pathway that is being regulated, and the effector or the product is an intermediate in a metabolic pathway. The effector is endogenous or exogenous to the cell. The effector is an end product of a biosynthetic process. The effector or the product is chosen from protein, enzyme, protein pharmaceutical, metabolite, drug, dye, vitamin, food additive, chemical additive, pesticide, insecticide, feed compound, and a waste product. The drug is chosen from antibiotics, anticancer drugs, antifungals, cholesterollowering drugs, and immunosuppressants. The RCANA is useful for regulating a biological pathway in a cell, for screening a population of cells for a cell that produces a bioproduct, for modulating expression of a nucleic acid, in gene therapy applications, and for facilitating industrial biosynthesis and bioremediation. The present sequence is a PCR refer to the procession of the procession o
                                                                                                   Ellington AD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004126882-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RCANA GPITH1P6 PCR primer #1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-SEP-2002; 2002US-00254568.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Enterobacteria phage T4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 24 BP; 9 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                  RIED/
                                                                                                                                                                                                                                                                                                                      COXJ
                                                                                                                                                                                                                                                                                                                                                                                      SOOT/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ELLI/)
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                                                                                                                                                                       SOOTER L.
DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ь
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ELLINGTON A
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                                                                                                                                                                                                                                                                                                                                                                                                                   ROBERTSON M P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; 2000US-0212097P.
; 2000US-00661658.
; 2000US-00666870.
; 2001US-00883119.
; 2001US-0324715P.
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                                                                   Cox JC,
                                                                                                           Hesselberth J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40
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95.8%;
                                                                          Riedel T,
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Pred. No. 1
                                                                   Thompson
r, Wilson
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                                                                       ָרֻ אָ
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                                                                       Robertson MP, Soote
Cload ST, Keefe AD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1,
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                                                                                                           Sooter
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

Example 1; SEQ ID NO 3; 78pp; English

CC domain, adding an effector molecule to the nucleic acids and isolating CC those nucleic acids that interact with the catalytic target of the CC catalytic domain), detection of a target using a RCANA, modifying a CC target using a RCANA (involving providing a RCANA, modifying a CC catalytic modification and modifying the target under conditions that CC cause a RCANA-specific activity, selecting an RCANA and detecting an CC RCANA (involving isolating an RCANA, creating a construct in which the CC catalytic activity of the nucleic acid upon exposure of the host cell to gene, introducing the construct into a host cell and measuring the CC catalytic activity of the nucleic acid upon exposure of the host cell to in a cell by gene therapy) which involves inserting into a gene that CC produces the product or regulates the production of a product in the CC cell an RCANA which comprises a catalytic domain, that modifies a CC transcript to alter its coding potential, and a regulatory domain which CC recognises an effector that alters the function of the product in the CC production of the product. The concentration of the catalytic domain, concacting the regulatory domain with an effector thereby regulating CC product is fully inhibited or is increased compared to a normal control CC level, or is partially inhibited according to the concentration of the gene. The CC effector is the product, where it accesses feedback inhibitor of the ceffector of the product is an intermediate in a metabolic pathway. The effector or the product is an intermediate in a cell control the product is chosen from protein, enzyme, protein pharmaceutical, metabolite, drug, dye, vitamin, food additive, chemical additive, insecticide, feed compound, and a waste product. The drug is chosen from antibiotics, anticancer drugs, antifungals, cholesterollowering drugs, and immunosuppressants. The RCANA is useful for regulating a biological pathway in a cell, for screening a population of cells for a cell that produces a bioproduct, for modulating expression of a nucleic acid, in gene therapy applications, and for facilitating industrial biosynthesis and bioremediation. The present sequence is a PCF industrial distribution of the present sequence is a PCF industrial distribution of the present sequence is a PCF industrial distribution. acid catalyst have been randomised, where the kinetic parameters of the catalytic domain are regulated by an effector that interacts with the effector domain. Also included are a nucleic acid comprising a gene, a RCANA inserted within the gene (where the presence of an effector causes the nucleic acid to catalyse a reaction), isolating an RCANA (comprising a catalytic and an effector domain involving randomising at least one nucleotide in the catalytic domain of a catalytically active nucleic acid to create a nucleic acid pool, removing from the nucleic acid pool those nucleic acids that interact with the catalytic target of the catalytic invention relates to a regulatable, catalytically active nucleic a ANA) segment comprising an effector domain and a nucleic acid catal ain in which one or more critical catalytic residues of the nucleic ä the construction of an RCANA. catalytically active nucleic acid acid œ,

Sequence 21 BP; 5 A; 2 C; 8 G; 6 T; 0 U; 0 Other;

RESULT 21
ABQ84377/c
ID ABQ843
XX
AC ABQ843 밁 8 Matches Query Match Best Local ABQ84377 standard; DNA; 20 16, σ 1 GCCTGAGTATAAGGTG 16 Similarity Conservative 12.2%; Score 16; 100.0%; Pred. No. 21 0 Mismatches DB 1; Length 21, 39; 0, Gaps

0

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RESULT 22
ABQ77191/c
ID ABQ77
XX
AC ABQ77
XX
AC ABQ77
XX
XX
XX
XX
XX
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                 known as prolyfoligopeptidase). (I) has antiinflammatory, antiasthmatic, antipsoriatic, antiarthritic and antirheumatic activities, and can be used for the manufacture of a medicament for regulating ppp10 expression or for preventing or treating inflammatory disease e.g., inflammatory bowel disease, asthma, atopy, rheumatoid arthritis or psoriasis. (I) can also be used in an assay for detecting or measuring DPP10 in a sample. A host cell comprising (I) can be used for products, or in drug screening systems to identify agents for diagnosis or treatment of individuals having or susceptible to inflammatory disease. Human DPP10 is located on chromosome 2, more specifically chromosome 2q14. ABQ84254 to ABQ84612 and ABP5569 to ABP55629 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DPP10; dipeptidyl peptidase; prolyloligopeptidase; enzyme; asthma; antifilammatory; antiasthmatic; antipeoritatic; antiatrhritic; antirheumatic; vaccine; gene therapy; inflammatory disease; inflammatory bowel disease; atopy; rheumatoid arthritis; psoriasis;
                                                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid sequence comprising DPP10 mRNA, useful for the manufacture of a medicament for regulating DPP10 protein expression or for preventing or treating inflammatory disease e.g., inflammatory bowel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-APR-2001; 2001GB-00010044.
24-APR-2001; 2001GB-00010046.
12-OCT-2001; 2001GB-00024575.
12-OCT-2001; 2001GB-00024594.
                24-APR-2003
                                                ABQ77191;
                                                                               ABQ77191 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a new isolated nucleic acid sequence (I) comprising a DPP10 mRNA sequence. DPP10 is a dipeptidyl peptidase (also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 43; Page 313; 321pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-093132/08.
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                                                                                                191/c
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                                                                                                                                                                                          w
                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                          CTGAGTATAAGGTGACTTA 21
                                                                                                                                                             CTGAGAATAAGGTGACCTA 1
                                                                                                                                                                                                                           Conservative
                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Moffat MF,
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                                                                               DNA; 20
                                                                                                                                                                                                                                      12.1%;
89.5%;
                                                                               ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Allen
                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                        Score 15.8;
Pred. No. 4:
                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lench
                                                                                                                                                                                                                                          42;
                                                                                                                                                                                                                                                         DB 1; Length 20;
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                                                                                                                                                                                                                         2;
                                                                                                                                                                                                                            Indels
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RESULT 23
AAVO1286
ID AAVO1
XX AAVO1
XX AAVO1
XX 23-M2
XX Skele
XX Skele
XX PCR I
KW Syntl
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ATP) binding cassette transporter gene subfamily C12, i.e. Cystic fibrosis transmembrane conductance regulator/multidrug resistance-like subgroup (CFTR/MRP) family) polypeptide and its encoding polypucleotides The polypeptide is useful for screening agonists and antagonist of the ABCC12 polypeptide. The products of the invention are useful for screening an active ingredient for preventing and treating paroxysmal kinesigenic chorecathetosis or pathologies linked to dysfunction of transport of organic anion transportes that as cysteinyl leukotriene, anionic drugs, such as glutathione, glucuronate or sulphate conjugated to acidic ligands, such as glutathione, glucuronate or sulphate conjugated drugs and can be used for somatic gene therapy. This sequence represents a second or the product of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       multidrug resistance-like subgroup; somatic gene therapy; ABCC12; paroxysmal kinesigenic choreoathetosis; cysteinyl leukotriene; anionic drug; methotrexate; neutral drug; glutathione; glucuronate;
     Synthetic
                                                        universal
                                                                                                                                Skeletal muscle sodium channel PCR primer for universal mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New ATP-binding cassette transporter gene subfamily C12, ABCC12 polypeptide, useful for preventing or treating paroxysmal kinesigenic
                                                   PCR primer; polymerase chain reaction; amplification; UM-STS; universal mammalian sequence tagged site; genomic map; clone;
                                                                                                                                                                                      23-MAR-1998
                                                                                                                                                                                                                                       AAV01286;
                                                                                                                                                                                                                                                                                          AAV01286 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 44; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AdenoSine triphosphate (ATP)-binding cassette transporter subfamily C12; cystic fibrosis transmembrane conductance regulator; human; CFTR/MRP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human ABCC12 exon 15/intron 15 boundary (short isoform).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human ABCC12 isoform described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-093101/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rosier-Montus M,
Allikmets R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AVET ) AVENTIS PHARMA SA.
(USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-MAR-2001; 2001US-0272759P
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                                                                                                                                                                                                                                                                                                                                                                                                                        17 ATTATACCAGCATCTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     corresponding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fibrosis transmembrane conductance regulator; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTATACCAGCATCGTC 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       describes a novel human ABCC12 (adenosine triphosphate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Prades C,
                                                                                                                                                                                                                                                                                          DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11.8%;
94.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.4;
Pred. No. 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>ب</u>
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RESULT 24
ABZ86444
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XX Antia
KW Antia
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PR 24-AI

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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                         Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
     Nyce
                                                                                                                                                                         23-APR-2002; 2002WO-US013135
                                                                                                                                                                                                                                                                                       WO200285308-A2
                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human oligonucleotide sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABZ86444 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   are conserved among mammalian species, i.e. pairs of oligonucleotides from the present specification represent universal mammalian sequence-tagged site (UM-STS) primers. The primers are used to develop genomic maps, to isolate clones from libraries, to make cross-species comparisons and to develop additional genetic markers. UM-STS allow genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence represents a specifically claimed oligonucleotide PCR primer. The oligonucleotide can be used for polymerase chain reaction (PCR) amplification of DNA, specifically regions of specific genes that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 11; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New oligonucleotide primers amplifying gene regions conserved among mammals - useful for developing genomic maps, isolating clones and o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-435083/40
                                                                                                                24-APR-2001; 2001US-0286137P
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                                                        (EPIG-) EPIGENESIS PHARM INC
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(UNMS ) UNIV MICHIGAN STATE
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                                                                                                                                                                                                                                                                                                                                                                                                     inflammation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to be made between more species
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  Sandrasagra A,
                                                                                                                                                                                                                                                                                                                                                                                                     respiratory
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85.0%;
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Pred. No. 47;
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  Pabalan
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junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiaethmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also of or enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing or depleting levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of biquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at fig., wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel pharmacoutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5 or 3 end genomic flanking regions, 5 and 3 intron-exon junctions, or regions within 2-10 nucleotides of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its responding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 15;
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                S
                                  Query Match
Best Local S
Matches 17
                 19
                                             Similarity
                 TTATACTTGTAATCTATCTA 38
TTATATCTGTAATCTATCCA
                                    Conservative
                                             85.0%;
                                                    11.6%;
                                   0;
                                             Score 15.2;
Pred. No. 4
                                    Mismatches
                                                    DB 1; Length 20;
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••
                                    Indels
                                    0
                                    Gaps
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Sequence 20

BP; 6 A; 4 C; 1 G; 9 T; 0 U; 0 Other;

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Human myosin X-derived oligonucleotide
                              29-JUL-2004
                                                             ABD22674;
                                                                                           ABD22674 standard; DNA;
                             (first entry)
                                                                                            20
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 SEQ ID 1686.
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ABD22674
ID ABD22
XX ABD222
XX ABD222
XX ABD22
X Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antisthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

sapiens.

WO200285309-A2

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P

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RESULT 26
ABM83051/C
ID 3081/S
XX
ABM830
AC AB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery construction also describes a kit, that comprises: (a) a delivery construction also describes a kit, that comprises: (a) a delivery construction also describes a kit, that comprises: (a) a delivery construction also describes a kit, that comprises: (a) a delivery construction also describes a composition construction and construction and construction and construction and construction and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or construction and comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to construction, and/or bronchoconstriction and/or lung for inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction are associated with a disease or condition such as pulmonary vasoconstriction.

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary transplantation repetition, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system content of the co
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Matches 17
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Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to
                                                                                                                                                                                                                                  GpITh1P6.131 aptamer construct
                                                                                                                                                                                                                                                                                  16-AUG-2002
                                                                                                                                                                                                                                                                                                                                  ABN83051
                                                                                                                                                                                                                                                                                                                                                                               ABN83051 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel composition
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acids associated with lung airway or lung dysfunction, and
                                                              misc_binding
                                                                                                                                     Unidentified
                                                                                                                                                                                  Aptazyme; regulatable; aptamer; luciferase; cyclic AMP; ss; GpITh1P6.131.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      comprising oligonucleotides,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATACTTGTAATCTATCTA 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATATCTGTAATCTATCCA 20
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                                                                                        Location/Qualifiers
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L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                               RNA;
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                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                               ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15.2;
Pred. No. 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 20;
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Query Match
Best Local S
Matches 22
                                                                                                                                                                                  domain, and the intron splicing reaction occurs in vitro. The aptrazyme is useful: (1) in assays to detect the presence of ligands or to detect activation of an aptrazyme by an effector; (2) in the identification, isolation and enhancement of allosteric effectors and of the allosterically regulatable aptrazymes with which they interact; (3) to activate or repress a reporter gene (e.g. luciferase) containing an engineered intron in response to an endogenous activator; and (4) to monitor intracellular levels of proteins or small molecules such as cyclic AMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_binding
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                                                                                                                                                  Sequence 82
                                                                                                                                                                                                                                                                                                                                                         invention. The invention relates to a novel aptazyme construct compriance to the invention relates to a novel aptazyme construct compriance a regulatable Group I intron aptamer oligonucleotide sequence having allosterically regulatable regulatory domain, where the kinetic parameters of the aptazyme on a target gene vary in response to the interaction of an allosteric effector molecule with the regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig 2A; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aptazyme construct for detecting the presence of ligands, comprises regulatable Group I intron aptamer oligonucleotide with a regulatory
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                                                                                          Similarity
AGACGATGCTGGTATAATTTAGCACGGGATTGTCT
                                AGACAATCCCGTGCTAAATTATACCAGCATCGTCT
                                                                                                                                                  ВP ;
                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modulates their kinetic parameters in response
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28. .33
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48. .62
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67. .68
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RESULT 27
AAL43067/c
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XX AAL430
XX AAL430
XX PAGULA
XX Regula
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                                                                                                                                         New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                       Example 1;
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                                                                                                                                                                                                                                                   Davidson
                                                                                                                                                                                                                                                                    Ellington AD,
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                                                                                      Fig 2A;
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The present invention relates to regulatable, catalytically active nucleic acids (RCANAs) which are regulated by polypeptides. These at useful for regulating gene expression, in assays for detecting the presence of ligands, for activation of an effector of RCANA, and in

are gene

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RESULT 28
ALA43090/c
ID AAL430
XX AAL430
XX Regula
XX FT Misc_k
FT misc_l
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WPI; 2002-122216/16
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                                            UNIV TEXAS SYSTEM
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                                                              2000US-0212097P.
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                 Hesselberth J, ox JC, Reidel
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78. .79
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67. .68
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29. .33
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34. .3
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Matches 22
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78. .79
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14-SEP-2000; 2000US-006661658.
20-SEP-2000; 2000US-00666870.
14-JUN-2001; 2001US-00883119.
24-SEP-2001; 2001US-0324715P.
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DAVIDSON E.
COX J C.
RIBDEL T.
WILSON C.
CLOAD S T.
KEEPE A D.
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HESSELBERTH
THOMPSON K.
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

WPI; 2004-560517/54.

Example 1; SEQ ID NO 38; 78pp; English.

The invention relates to a regulatable, catalytically active nucleic acid (RCANN) segment comprising an effector domain and a nucleic acid catalyst commain in which one or more critical catalytic residues of the nucleic acid catalytic domain are regulated by an effector that interacts with the catalytic romain. Also included are a nucleic acid comprising a gene, a catalytic of the nucleic acid to catalyte are areaction), isolating an RCANA inserted within the gene (where the presence of an effector causes the nucleic acid to catalyte a reaction), isolating an RCANA (comprising comprising a catalytic and an effector domain involving randomising at least one nucleic acid to catalyte a removing from the nucleic acid pool those comprising a machine the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acids and isolating comprising an acid that interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acids and isolating catalytic domain, adding an affector molecule to the nucleic acids and isolating catalytic domain, adding an effector molecule to the nucleic acids and isolating an RCANA (involving providing a RCANA, modifying a catalytic target using a RCANA (involving providing a RCANA, modifying a respectific modification and modifying the target under conditions that catalytic domain, introducing the construct into a heat cell and measuring the catalytic activity of the nucleic acid upon exposure of the host cell to catalytic activity of the nucleic acid upon exposure of the bost cell to regulate the production of a reporter produces the product or regulates the production of the product in the catalytic domain, which comprises a catalytic domain, that modifies a catalytic domain, which comprises a catalytic domain of the catalytic domain, of the catalytic domain, of the effector methodic, where it accesses feedback inhibitor of the effector. The RCANA blocks or activates expression of the gene. The effector is the product, where i

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RESULT 30
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20-SEP-2000; 2000US-006668719.
14-JUN-2001; 2001US-00881119.
24-SEP-2001; 2001US-0324715P.
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CLOAD S T.
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

Example 5; SEQ ID NO 65; 78pp; English.

CC catalytic domain are regulated by an effector that interacts with the Ceatalytic domain. Also included are a nucleic acid comprising a gene, a CC RCANA inserted within the gene (where the presence of an effector causes CC the nucleic acid to catalyse a reaction), isolating an RCANA (comprising CC a catalytic and an effector domain involving randomising at least one CC nucleotide in the catalytic domain involving randomising at least one CC nucleotide in the catalytic domain of a catalytic target of the catalytic domain, adding an effector molecule to the nucleic acid pool those CC those nucleic acids that interact with the catalytic target of the catalytic domain, detection of a target using a RCANA, specific modification and modifying the target under conditions that cause a RCANA-specific activity), selecting an RCANA capable of target arget as RCANA-specific activity), selecting an RCANA and detecting an CC catalytic activity of the nucleic acid sporter cC gene, introducing the construct into a host cell and measuring the locatalytic activity of the nucleic acid upon exposure of the host cell to CC catalytic activity of the nucleic acid upon exposure of the product in the CC catalytic activity of the nucleic acid upon exposure of the product in the CC catalytic domain, which comprises a catalytic domain, that modifies a contacting the regulatory domain with an effector thereby regulating production of the product in the CC cranscript to alter its coding potential, and a regulatory domain which cranscript to the catalytic domain of the RCANA. The product of the product is fully inhibited according to the concentration of the catalytic domain, that modifies a contactivity of the catalytic domain of the RCANA. The production of the gene the CC gene. The RCANA blocks or activities expression of the gene the CC gene. The RCANA blocks or activities expression of the gene the CC gene. The RCANA blocks or activities expression of the gene the CC gene. The contactivity of the catalytic domain of the gene the conta The invention relates to a regulatable, catalytically active nucleic ac (RCANA) segment comprising an effector domain and a nucleic acid cataly domain in which one or more critical catalytic residues of the nucleic acid catalyst have been randomised, where the kinetic parameters of the catalytically active nucleic acid of the

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The present invention describes a method for determining the methylation status of CpG dinucleotides within the genes for oestrogen receptor, p27, p16, progesterone receptor, myoglobin, pcna, cdc2, c-erB2, p53 and/or CEA, which comprises contacting the target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides, and determining from the methylation status of the CpG positions the presence of a colon cancer. A set of oligomers or peptide nucleic acid (PNA) oligomers can be used as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNP) of a corresponding genomic DNA by analysis of a chemically pretreated genomic DNA. The pretreated genomic DNA is useful for the determination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the product is chosen from protein, enzyme, protein pharmaceutical, metabolite, drug, dye, vitamin, food additive, chemical additive, pesticide, insecticide, feed compound, and a waste product. The drug is chosen from antibiotics, anticancer drugs, antifungals, cholesterollowering drugs, and immunosuppressants. The RCANA is useful for regulating a biological pathway in a cell, for screening a population of realls for a cell that produces a bioproduct, for modulating expression of a nucleic acid, in gene therapy applications, and for facilitating industrial biosynthesis and bioremediation. The present sequence is an RCANA based on the bacteriophage T4 thymidylate synthase gene self-
                                                                                                                                                                                                                                                                                                                     Determining methylation status of CpG dinucleotides using modified genomic sequences, oligonucleotides and/or PNA-oligomers, useful in characterization, grading, staging and/or diagnosis of colon cances
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; procesterone receptor; pcna; CEA; cdc2; c-erbB2; methylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human progesterone receptor PCR primer SEQ ID NO:310.
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characterisation; classification; diagnosis; differentiation;
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Pred. No. 29;
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                                                    The present invention describes a method for determining the methylation estatus of CpG dinucleotides within the genes for oestrogen receptor, p21, CC p27, p16, progesterone receptor, myglobin, pcna, cdc2, c-erB2, p53 cC and/or CEA, which comprises contacting the target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides, and determining from the methylation status of the CpG positions the presence of a colon cancer. A set of oligomers or peptide nucleic acid (PNA)-oligomers can be used as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNP) cc cytosine methylation state and/or single nucleotide polymorphisms (SNP) cc of a corresponding genomic DNA by analysis of a chemically pretreated genomic DNA. The pretreated genomic DNA is useful for the determination of the methylation status of a corresponding genomic DNA and/or detection cof SNPs. The methods and pretreated genomic DNA are also useful for the characterisation, classification, diagnosis and differentiation of colon cell proliferative disorders. ACF62752 to ACF63278 represent sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              petermining methylation status of CpG dinucleotides using modified genomic sequences, oligonucleotides and/or PNA-oligomers, useful in characterization, grading, staging and/or diagnosis of colon cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 26; Page 178; 219pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
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Pred. No. 64
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Sequence 18

BP; 5 A; 7 C; 1 G;

5 T; 0 U; 0 Other;

BB

1;

Length

18;

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RESULT 33
ADB54669/c
ID ADB5466
XX ADB5466
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XX ADB546
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XX COLOR
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                                                                                                    Query Match
Best Local S
Matches 15
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Best Local 9
                                                                                                                                                                                                                                                                            The invention relates to a novel method for detecting and differentiating between colon cell proliferative disorders associated with at least one gene or its regulatory regions. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least one reagent or a series of reagents, where the reagent or series of reagents, distinguishes between methylated and non methylated CpG dinucleotides within the target nucleic acid. The molecules of the invention demonstrate cytostatic activity whilst the method may useful for detecting and differentiating between colon cell proliferative disorders, including cancers such as colon adenoma and colon carcinoma. The PNA (peptide nucleic acid)-oligomers are useful as probes for determining cytosine methylation state or single nucleotide polymorphisms. The current sequence is that of the hybridisation on an oligonucleotide of the invention which was used to analyse the genomic
                                                                                                                                                                                                           Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Detecting and differentiating between colon cell proliferative disorders associated with a gene or its regulatory regions comprises contacting a target nucleic acid in a biological sample obtained from the subject with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      colon cell cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 36; Page 38; 74pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-731620/69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-FEB-2002; 2002EP-00004551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-FEB-2003; 2003WO-EP002035
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Adorjan
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                                                61
18
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                                                                                                                               Similarity
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                                                CAATCCCGTGCTAAATT 77
CAATCCCTCGCTAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAATCCCTCGCTAAATT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Burger M,
Schmitt A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 proliferative disorder; non methylated CpG dinucleotide;
                                                                                                                                                                                                           BP; 5
                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer;
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                                                                                                                         10.5%;
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N
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Pred. No. 64;
0; Mismatches
                                                                                                                                                                                                        G; 5 T; 0 U; 0 Other;
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                                                                                                                                                       Score
                                                                                                                                  Pred
                                                                                                      Mismatches
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                                                                                                                                                       13.8;
                                                                                                                                  64;
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                                                                                                                                                     Length 18;
                                                                                                      Indels
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                                                                                                    Gaps
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RESULT 34
AAL43048/c
ID AAL430
XX AAL430
XX Regula
XX Re
ADA395A4/c
ID ADA395
XX ADA395
XX ADA395
XX DT 20-NOV
DT 20-NOV
DT RCANA
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to regulatable, catalytically active nucleic acids (RCANAs) which are regulated by polypeptides. These a useful for regulating gene expression, in assays for detecting the presence of ligands, for activation of an effector of RCANA, and in therapy. The present sequence is an oligonucleotide used in the construction of an RCANA
                                                                    regulatable catalytically active nucleic acid; RCANA; catalytic dom regulation; screening; gene therapy; biological pathway regulation; regulatory element; metabolic pathway; ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 94 BP; 27
                                                                                                                                                                        RCANA construction
                                                                                                                                                                                                                        20-NOV-2003
                                                                                                                                                                                                                                                                         ADA39564;
                                                                                                                                                                                                                                                                                                                      ADA39564 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ellington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JUN-2000; 2000US-0212097P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-JUN-2001; 2001WO-US019302.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Regulatable catalytically active nucleic acid; RCANA; ribozyme;
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                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cox JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
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ox JC, Reidel T;
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                                                                                                                                                                                                                                                                                                                         DNA;
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                                                                                                                                                                        related
                                                                                                                                                                                                                        entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              English.
                                                                                                                                                                        oligonucleotide
                                                                                                                                                                                                                                                                                                                            ΒP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 13.6;
Pred. No. 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                            domain;
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RESULT 36
ADQ96955/c
ID ADQ96
XX ADQ96
XX ADQ96
XX Z3-SE
XX RCANP
XX RCANP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 catalytically active nucleic acid (RCANA) into a gene that produces the product or regulates the production of the product in the cell, where the product or regulates the production of the product in the cell, where the product or regulates the production of the product in the cell, where the RCANA comprises a catalytic domain which modifies a transcript to alter that alters the function of the catalytic domain, and contacting the regulatory domain with an effector to regulate production of the product. Also described: (1) regulating a biological pathway in cell, and (2) as creening a population of cells for a cell that produces a bioproduct. The methods are useful for regulating a biological pathway in cell, or regulatory elements to control the expression of genes in a metabolic pathway, or as regulated selectable markers to increase a selective and in gene therapy. The present sequence represents an oligonuclection, and in gene therapy. The present sequence represents an oligonuclectide used in the construction of an RCANA, which is used in an example from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Regulating production of a product in a cell, comprises inserting a regulatable catalytically active nucleic acid into a gene that product the product or regulates the production of the product in the cell.
                                                                                                                                              RCANA; catalytically active regulatable nucleic acid; 88; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therapy; industrial biosynthesis; bioremediation; bacteriophage T4;
                                                                                                                                                                                                               RCANA GPITH1P6 mutagenic oligonucleotide B11.
                                                                                                                                                                                                                                                                                                               ADQ96955 standard; DNA; 94 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 94 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 5; Page 70; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wilson C, Cload ST,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-SEP-2001; 2001US-0324715P
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                 01-JUL-2004
                                                                                                Enterobacteria
                                                                                                                                                                                                                                              23-SEP-2004 (first entry)
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                                                 US2004126882-A1
                                                                                                                               thymidylate synthase; self-splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ARCH-) ARCHEMIX CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  present invention describes a method for regulating production of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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Ellington AD, Hebrary E, Cox JC,
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20-SEP-2000; 2000US-00666770.
14-JUN-2001; 2001US-00883119.
24-SEP-2001; 2001US-0324715P.
                                                                                                                                                                                                                                                                                                           15-JUN-2000; 2000US-0212097P
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                                                                                                                                                                                                                                                                             HESS/)
                                                                                                                                                                                                                 2004-560517/54.
                                                                                                                                                                                                                                     SOOTER L.
DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                                                                                                                                                             ELLINGTON A
HESSELBERTH
                                                                                                                                                                                                                                                                     ROBERTSON M P.
                                                                                                                                                                                                                                                                          THOMPSON K.
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ox JC, Riedel T,
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                                                                                                                                                                                                                          Robertson MP,
Cload ST, Ke
                                                                                                                                                                                                                          Keefe
                                                                                                                                                                                                                              Sooter L;
                                                                                                                                                                                                                          AD;
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residue and is regulated by effector that interacts with effector domain.

Example 5; SEQ ID NO 20; 78pp; English.

The invention relates to a regulatable, catalytically active nucleic acid (RCANA) segment comprising an effector domain and a nucleic acid catalytic domain in which one or more critical catalytic residues of the nucleic acid catalytic that in which one or more critical catalytic residues of the nucleic acid catalytic domain are regulated by an effector that interacts with the effector domain. Also included are a nucleic acid comprising a gene, a RCANA inserted within the gene (where the presence of an effector causes the nucleic acid to catalyte a reaction), isolating an RCANA (comprising catid comprising a gene, a catalytic and an effector domain involving randomising at least one nucleic acids that interact with the catalytically active nucleic acid comains, adding an effector molecule to the nucleic acids and isolating catalytic domain, adding an effector molecule to the nucleic acids and isolating a RCANA, adding an effector molecule to the nucleic acids and isolating a RCANA (involving providing a RCANA capable of target using a RCANA, precific acids that interact with the catalytic target of the catalytic domain) detection of a target using a RCANA, modifying a catalytic domain), detection of a target under conditions that cause a RCANA, specific acidity, selecting an RCANA capable of target using a RCANA (involving isolating an RCANA, creating a construct in which the catalytic acid is in position to regulate the expression of a reporter catalytic acid the product in sepuration of the exporter catalytic acid in a cell (by gene therapy) which involves inserting into a gene that product in the regulator of the product in the regulation of the reputation of the product in the catalytic domain, that modifies a fefector. The RCANA is useful for regulating production of a product in a cell (by gene therapy) which involves inserting into a gene that contacting the regulatory domain with an effector the product in the effector of the product in the catalytic domain.

CC production of the product. The concentrati the product is chosen from protein, enzyme, protein pharmaceutical, metabolite, drug, dye, vitamin, food additive, chemical additive, pesticide, insecticide, feed compound, and a waste product. The dru

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RESULT 37
ABN83053/c
ID ABN83
XX
AC ABN8:
XX
AC ABN8:
XX
DT 16-A
X
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Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chosen from antibiotics, anticancer drugs, antifungals, cholesterol-lowering drugs, and immunosuppressants. The RCANA is useful for regulating a biological pathway in a cell, for screening a population of cells for a cell that produces a bioproduct, for modulating expression of a nucleic acid, in gene therapy applications, and for facilitating industrial biosynthesis and bioremediation. The present sequence is an oligonucleotide used to mutate the catalytic region of an RCANA based on the bacteriophage T4 thymidylate synthase gene self-splicing intron.
                      15-JUN-2000; 2000US-00661658
                                                             15-JUN-2001; 2001WO-US019119
                                                                                                                                                     WO200196541-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 94 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                stem_loop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      stem_loop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_binding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-AUG-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTATAAGTCACCTTATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             regulatable; aptamer; luciferase; cyclic AMP; ss;
lbozyme; anti-theophylline; aptazyme pool.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aptazyme
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28. .33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note=
45. .46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            bound
                                                                                                                                                                                         bound_moiety= "Bases 35-34'
                                                                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                                                                                                                                                                                        bound_moiety=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag=
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                                                                                                                                                                                                                                                                                                                                                                       . 68
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Pred. No. 30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Bases 79-78"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Bases 9-4"
                                                                                                                                                                                                                                                           "Base
                                                                                                                                                                                                                                                                                                                                                                                                                                      "Bases
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   be repeated 1-4 times"
                                                                                                                                                                                                                                                           may be repeated 1-4 times"
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                                                                                                                                      Query Match
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Matches 21
                                                                                                                                                                 region to generate a pool of aptazymes of the presents invention. The group I intron aptamer oligonucleotide sequence having an allosterically regulatable regulatory domain, where the kinetic parameters of the aptazyme on a target gene vary in response to the interaction of an allosteric effector molecule with the regulatory domain, and the intron splicing reaction occurs in vitro. The aptazyme is useful: (1) in assays to detect the presence of ligands or to detect activation of an aptazyme by an effector; (2) in the identification, isolation and enhancement of allosteric effectors and of the allosterically regulatable aptazymes with which they interact; (3) to activate or represens a reporter gene (e.g. luciferase) containing an engineered intron in response to an endogenous activator; and (4) to monitor intracellular levels of proteins or small molecules such as cyclic AMP
                                                                                                                                      Sequence 82 BP; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ellington AD, Hessel Davidson E, Cox JC,
                                                                                                                                                                                                                                                                                                                                                                                                                 The sequence represents a portion of the P6 region of the Group I ribozyme joined to the anti-theophylline aptamer by a short randomised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Fig 3; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        regulatable Group I intron aptamer or domain, and modulates their kinetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aptazyme construct for detecting the presence of ligands, comprises a regulatable Group I intron aptamer oligonucleotide with a regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-090203/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TEXA ) UNIV TEXAS.
 56
                                  58
                                                                 21;
                                                                                   Similarity
 AGACGATGCTGGTATNATTTAGCACGGGATTGTCT
                              AGACAATCCCGTGCTAAATTATACCAGCATCGTCT
                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hesselberth J,
ox JC, Reidel T;
                                                                                                                                      A; 21 C; 16 G; 0 T; 20 U; 2 Other;
                                                                                 10.1%;
                                                                   0;
                                                                                 Score 13.2;
Pred. No. 34;
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                                                                    Mismatches
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RESULT 38
AAS56827
ID AAS56
XX AAS56
XX AAS56
XX Valid
XX Valid
XX Valid
XX Cytos
XX
                                                                                             Beger C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; BRCA-1 regulator; ribozyme; BR1, RNA target recognition; probe; cytostatic; RNA cleavage; tumour suppressor; PCR primer; CHLR2; AF6; B inhibitor dominant negative 4; breast basic conserved protein 1; BBC1; BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.
WPI; 2001-611503/70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200170982-A2.
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                                                                                                                                                                                                                                                                                                                                 23-MAR-2000; 2000US-00536058
                                                                                                                                                                                                                                                                                                                                                                                                                               23-MAR-2001; 2001WO-US009559.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-2001.
                                                                                                                                                                                           (BEGE/)
                                                                                                                                                                                      IMMUSOL INC.
BEGER C.
                                                                                             Barber J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                             Wong-Staal F;
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BR2;

Novel polypeptides that are the regulators of BRCA-1, useful for treating cancer and diagnosing the presence of neoplastic cells in biological

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RESULT 39
ABT356
XX ABT356
XX ABT356
XX ABT356
XX Cytost
CY Cytost
KW Antise
KW Schizo
XX Homo s
XX Homo s
XX Homo s
XX HOZ003
XX WO2003
XX 17-SEP
XX I7-SEP
XX MPI; 2
XX WPI; 2
XX WPI; 2
XX WPI; 2
XX WPI; 2
XX Disclo
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Best Local S
Matches 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequences AAS56729-AAS56968 represent DNA encoding BRCA-1 regulators, ribozyme target recognition RNA sequences. DNA fragments encoding the RNA and primers used in the methods of the invention. Hybridisation of ribozymes to their targets results in cleavage of the RNA target. The ribozymes can be used to cleave regulators of the tumour suppressor BRCA-1, resulting in upregulation or downregulation of BRCA-1 in a cell. The mRNA targets include those encoding the BRCA-1 regulator BR1, inhibitor dominant negative 4 (104), breast basic conserved protein 1 (BBC1), CHLR2, AF6, BR2 and BR3. Regulation of BRCA-1 is useful for treating and diagnosing cancer and other proliferative disorders. The severity of an incidence of cancer can be lessened by regulating tumour proliferation through modulation of BRCA-1 expression. The sequences of the invention are useful in the development of anti-cancer drugs
                                                                                                                                                                                                                                                                                                                                                                                                                            Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression;
                                                                                                     New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                    WO2003025175-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABT35681 standard;
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                                                                                                                                                                                               Telerman A,
                                                                                                                                                                                                                                                           17-SEP-2001; 2001FR-00011978.
                                                                                                                                                                                                                                                                                         17-SEP-2002; 2002WO-IB004208
                                                                                                                                                                                                                             (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84 GCATCGTCTTGATGCC 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         suppression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                               Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                protein ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         related human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9.8%;
87.5%;
                                                                                                                                                                                                 Tuijnder
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 12.8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82;
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The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that

obesity, by increasing thermogenesis in brown adipose tissue (BAT). The method involves increasing the expression of the BAT gene, mitochondrial uncoupling protein 1 (UCPI), especially by contacting the regulatory region of the gene with the nuclear factor erythroid 2 (NF-E2) transcription factor. This sequence represents an allowed

Example 2; Page 17; 57pp;

English.

Disclosure; Page 187;

720pp;

French

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RESULT 40
ACC80518/c
ID ACC805
XX ACC805
XX ACC805
XX ACC805
XX MOUSE;
XW MOUSE;
XW MOUSE;
XW MO2003
XX Synthe
XX WO2003
XX WO2003
XX WO2003
XX WO2003
XX ICOUU
XX CASE
PR 24-SEE
XX KOZAK
XX WPI; :
XX AMP1; :
XX AMP1; :
XX The m;
XX The icobesic
CC region
CC region
CC region
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Best Local S
Matches 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mitochondrial uncoupling factor; nuclear factor erythroid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mouse; UCP1; ds; anorectic; expression modulator; thermogenesis; brown adipose tissue; obesity; weight disorder; enhancer; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC80518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17
                                                                                                                                                                                     Ameliorating or preventing in mammals, symptoms of a disease treatable by increasing uncoupling protein 1 (Ucpl) expression, by administering a compound that causes an increase in concentration of NFE212 protein, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC80518;
                                                                                                                                                                                                                                                                                                   Kozak LP,
                                                                                                                                                                                                                                                                                                                                      (LOUU ) UNIV LOUISIANA
                                                                                                                                                                                                                                                                                                                                                                        24-SEP-2001; 2001US-0324400P.
                                                                                                                                                                                                                                                                                                                                                                                                           24-SEP-2002; 2002WO-US030266.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003026576-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMSA probe for protein binding to mouse UCP1 enhancer region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGCCCTTGGCAGAT 109
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                                                                                                                                                                                                                                                                                                   Rim JS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA; 17
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Pred.
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RESULT 41
ADB41555/6
ID ADB415
XX Cytost
XX PO WO2003
XX Homo &
PN WO2003
XX 17-SEE
XX Homo &
PN WO2003
XX IN-SEE
XX
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Best Local S
Matches 14
iragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acide, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  identify which sequences in the mouse UCP1 gene enhancer region (ACC80501) are used to bind CREB protein. The treatment involved modulation of Nfe212 gene expression, an increase in Ucp1 expression leading to an enhancement of growth and differentiation of brown adipose tissue. The treatment is useful for ameliorating or preventing the symptoms of a disease treatable by increasing Ucp1 expression, in mammals, e.g. weight disorder which can be ameliorated or prevented with an increase in brown adipose tissue thermogenesis such as obesity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 251; 771pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001; 2001FR-00011981.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; primer; probe; tumour suppression; tumour reversion; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to the isolation of 6327 nucleotide sequences fragments of at least 15 consecutive nucleotides of these nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003040369-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amson R,
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(first en
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Pred. No. 80;
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 17;
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84

GCATCGTCTTGATGCC

99

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Mismatches

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80;

Local Similarity

14;

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RESULT 42
ADD42040
ID ADD42
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Query Match
Best Local S
Matches 14
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Best Local S
Matches 14
                                                                                                                                                          The invention relates to novel mutant forms of the rice acetolactate synthase (ALS) gene encoding ALS resistant to pyrimidinyl carboxy herbicides. Plants which may be transformed with the mutant gene incl rice, and also maize, barley, wheat, soya, cotton and tobacco. The mu gene may be useful in the production of herbicide-resistant plants where can be cultivated in the presence of the herbicide. The present seque is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnos and/or prognosis of these diseases. The nucleotides and polypoptides also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                      Genes of rice origin encoding pyrimidinyl carboxy herbicide acetolactate synthase for production of herbicide resistant rice and other plants.
                                                                                                         Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TSUB )
(NAAG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rice acetolactate synthase related oligonucleotide 3-1-1 SEQ ID NO:21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADD42040;
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                                                                                                                                                                                                                                                                                                                                                                                      Example 4; SEQ ID NO 21; 96pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-902935/82.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-FEB-2003; 2003WO-JP001917.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ss; rice; acetolactate synthase; ALS; pyrimidinyl carboxy herbicide;
herbicide-resistance; herbicide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADD42040 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81 CCAGCATCGTCTTGAT 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGGATGGTCTTGAT
9.8%;
ilarity 87.5%;
Conservative
                                                                                                            BP; 2 A; 4 C; 5 G; 6 T; 0 U; A Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17
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Pred. No. 8
                            Score 12.8;
Pred. No. 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tanaka
                                                         17;
                                                                                                                                                                                               present sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e resistant
e strains or
                                                                                                                                                                                                                         co. The mutant plants which
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RESULT 44
ACC53993/c
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AC ACC539
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                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 14
                                                                                                                                                                                                                                                                                                                                              in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, viruside, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. The present sequence is that of a nucleic acid sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                   27-JUN-2003
                                                  ACC53993;
                                                                                 ACC53993 standard,
                                                                                                                                                                                                                                                                                                 Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; SEQ ID NO 2422; 30pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-313354/30.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tumour suppression; tumour reversion; apoptosis; virus resistance; cytostatic; virucide; neuroprotective; noctropic; neuropetic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human tumour suppression/reversion-related DNA sequence SeqID2422
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                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/publishedpct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention relates to novel isolated nucleic acid sequences involved
                                                                                                                                                                                                  86 ATCGTCTTGATGCCCT 101
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                                                                                                                                                                  ATCTTCTTGATGTCCT 17
                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                   BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amson R,
                 (first entry)
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                                                                                 DNA; 17
                                                                                                                                                                                                                                               9.8%;
87.5%;
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                                                                                                                                                                                                                                                                  Score 12.8;
                                                                                                                                                                                                                                                    Pred.
                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                    No.
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RESULT 45
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Matches 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance, invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease
                                                                                                                                                                                                                                                                       US2003125270-A1
                                                                                                                                                                                                                                                                                                                           Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           HCV DNAzyme substrate sequence #1346.
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                                                                                                                                                             18-DEC-2000; 2000US-00740332.
                                                                                                                                                                                                                     03-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1;
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                              (BLAT/)
                                                                                                            18-DEC-2000; 2000US-00740332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tuijnder M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                           enzymatic nucleic acid; RNA cleavage; hepatitis infection; type I interferon; DNAzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
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                                                       BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGCCCTTGGCAGAT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGTCTTGGCAGAT 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9.8%;
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Pred. No. 8
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RESULT 46
AAT54644/c
ID AAT546
XX AAT546
XX AAT546
XX AAT546
XX CACAPP
C 22-APP
C 22-APP
XX Enzyma
KW Enzyma
KW Enzyma
KW TNF-all
KW TNF-all
KW TATS-all
KW MATHORY
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Best Local S
Matches 11
23-FEB-1994
22-MAR-1994
04-APR-1994
07-APR-1994
15-APR-1994
15-APR-1994
18-MAY-1994
06-JUL-1994
15-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; cancer; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroscretenosis; transplant rejection; rheumatoid arthritis; psoriasis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an enzymatic nucleic acid molecule which specifically cleaves RNA derived from hepatitis C virus (HCV), in which the binding arms of the enzymatic nucleic acid molecule comprises sequences complementary to any of the defined substrate sequences given in the specification. The nucleic acid molecule may be administered for the treatment of HCV infections, especially in combination with type I interferons. The present sequence represents a HCV DNAzyme substrate
                                                                                                                                                                                                                                                                          23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                31-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                     WO9523225-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus
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22-APR-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (PAVC/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 4 A; 6 C; 4 G; 0 T; 3 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-031273/03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
  94US-00201109.
94US-00218934.
94US-0022795.
94US-00224483.
94US-00227958.
94US-00228041.
94US-00245736.
94US-00291932.
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RESULT 47
ABH36274/C
ID ABH362
XX ABH362
XX ABH362
XX OBH362
XX OBH367
XX Oligon
XX Oligon
XX SNP; 8
KW SNP; 8
KW SP; 8
KW Centra
XX

22-FEB-2002

(first

entry)

ABH36274;

ABH36274 standard;

DNA;

Oligonucleotide SEQ ID NO 236251

for

detecting SNP TSC0057662

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic

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15

Query Match
Best Local Similarity
Matches 13; Conserv

Conservative

0

9.5%;

Score 12.4; Pred. No. 91; Mismatches

DB

1; 1;

Length 15; Indels

0

Gaps

0;

31

TCTATCTAAACGGG TCTATCTAAAGGGG

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16-AUG-1994
17-AUG-1994
19-AUG-1994
02-SEP-1994
08-SEP-1994
23-SEP-1994
23-SEP-1994
23-SEP-1994
03-OCT-1994
07-OCT-1994
11-OCT-1994
11-OCT-1994
                                    contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these maNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
                                                                                                                                                                                                                                                                                                                                                               Grimm
Modak
Tracz
Sequence 15
                                                                                                                                                                                      The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that
                                                                                                                                                                                                                                                               Claim
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                                                                                                                                                                                                                                                                                                       Ribozymes
                                                                                                                                                                                                                                                                                                                                  WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                                                                                           Stinchcomb
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28-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                       bozymes having modified bases and inhibiting disease related genes.
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BP; 4 A;
                                                                                                                                                                                                                                                              221;
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94US-00345516.
94US-00357577.
94US-00363233.
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94US-00316771.
94US-00319492.
94US-00321993.
94US-00334847.
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94US-00292620.
94US-00293520.
94US-00300000.
94US-00303039.
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94US-00311749.
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4 C; 3
G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                        methods
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                                                                                                                                                                                                                                                                                                                                                                                Sweedler D,
                                                                                                                                                                                                                                                                                                        producing
                                                                                                                                                                                                                                                                                                                                                                                                           Dudycz LW;
                                                                                                                                                                                                                                                                                                                                                                                            Mcswiggen JA;
                                                                                                                                                                                                                                                                                                        them
                                                                                                                                                                                                                                                                                                                                                                                Thompson JD;
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Best Local S
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 236251; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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 Olek A,
                                                                                                                                                                                                                                              Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13 BP; 2 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
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                                                      07-APR-2000; 2000DE-01019173
                                                                                06-APR-2001; 2001WO-IB000713
                                                                                                                                      WO200177384-A2
                                                                                                                                                                Homo sapiens
                                                                                                                                                                                           central nervous
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                                                                                                                                                                                                                                                                                                                               ABH36275 standard; DNA; 13
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                                                                                                            18-OCT-2001.
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                                                                                                                                                                                                      single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; ide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
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                            EPIGENOMICS AG
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Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                   AACGACTATCCC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                          system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                              SEQ ID NO 236252 for detecting SNP TSC0057662.
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 Berlin
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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                                                                                                                                          Query Match
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Matches 12
                                                                                                                                                                                         acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABF9989 and ABH00010-ABF9989 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
                                                                                                                                        Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 236252; 29pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI;
                                                                                                                                                                            ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers
                               118 AACGACTATCCC 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-657177/75
N
                                                                                    Similarity
AACGACTATCCC 13
                                                                   ilarity 100.0%; I Conservative 0;
                                                                                                                                          BP; 4 A; 6 C; 1 G; 2 T; 0 U; 0 Other;
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0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                    German
                                                                                                                                                                                                                                                                                                                                                                                  or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       typing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytosine
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                                                                       Gaps
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RESULT 49
AB199108
ID AB199
AC AB190
AC AC10
AC AB199
AC AB19
AC AB19 Human; PCDH2; protocadherin 2; haplotyping; polymorphic variant; single nucleotide polymorphism; cytostatic; cancer; chromosome 50 allele-specific oligonucleotide; ASO; PCR primer; 88. Human PCDH2 ASO PCR primer SEQ ID NO ABI99108; 27-FEB-2002 ABI99108 standard; DNA; 15 (first entry) ₽₽ 65

sapiens.

13-DEC-2001 WO200194361-A2

06-JUN-2001; 2001WO-US018321.

06-JUN-2000; 2000US-0209564P.

(GENA-) GENAISSANCE PHARM INC

Kliem SE, Koshy B, Tanguay DA

2002-097928/13.

New protocadherin 2 (PCDH2) polymorphic variants and encoding genes, useful in expressing PCDH2 protein for screening candidate drugs to diseases related to PCDH2 activity. treat

Claim 16; Page 14; 127pp; English.

The invention relates to haplotyping the protocadherin 2 (PCDH2) gene, comprising determining which of the haplotypes given in the specification defines one or both copies of the individual's pCDH2 gene. The polymorphisms are within a 30244 base pair sequence (ABA05413), fully

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RESULT 50
AAX31622
ID AAX31
AC AAX31
XX AAX31
AC AAX31
XX Tag s
XX Tag s
XX Homo
XX Homo
XX Homo
XX Homo
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PN 26-NC
XX YO985
PN VO985
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XX WPI;
XX WP
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Matches 12
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                                                    AAX30947-31815 represent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Use of isolated gene transcripts - useful for developing products diagnosis, prognosis and treatment of cancers, particularly colon pancreatic cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tag sequence; colorectal cancer;
diagnosis; prognosis; treatment;
                                       treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vogelstein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Page 65; 120pp; English.
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85.7%;
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Pred. No. 98;
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ss.
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cancer

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104 GCAGATAAATGCCTA 118

Query Match Best Local S Matches 13

Similarity

9.0%;

Score 11.8; DB 1; Length 15; Pred. No. 1e+02;

4 U;

0 Other;

Conservative

0

Mismatches

Indels

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Sequence 15

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RESULT 51
AAZ62880/c
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                                  The present sequence represents the preferred target sequence of an CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme ctarget sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the C length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with hepatocellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune
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Best Local
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18-SEP-1998;
25-FEB-1999;
23-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.
                                                                                                                                                                                                                                         Claim 1; Page 66; 123pp; English
                                                                                                                                                                                                                                                                  hepatitis
                                                                                                                                                                                                                                                                                                         WPI; 2000-062023/05.
                                                                                                                                                                                                                                                                                                                                   Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hepatitis C virus.
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                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                 ribozymes for the treatment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13;
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                           and
                                                                                                                                                                                                                                                                   C
                                                                                                                                                                                                                                                                                                                                   Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for HH ribozyme HCV-9353 which cleaves HCV RNA
                                                                                                                                                                                                                                                                     infection.
BP; 3 A; 5 C; 3 G; 0 T;
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                           cancer
                                                                                                                                                                                                                                                                                                                                                                                      98US-0083217P.
98US-0100842P.
99US-00257608.
99US-00274553.
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86.7%;
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Pred. No. 1
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                                                                                                                                                                                                                                                                                 of
f
                                                                                                                                                                                                                                                                                   diseases
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                                                                                                                                                                                                                                                                                   conditions related
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GCAGGTAGATGCCTA 1

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RESULT 52
AAP47620/c
ID AAP476
XX IGFBP3
XX HOMO E
XX AMELI
XX AMELI
XX AMELI
XX AMELI
XX AMELI
XX AMELI
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Matches 13
                                                                                                                                                                                                                                                                                                                                                                                        oligonicleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warte, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic brain or skin, growth factor-mediated malignancies, other sclerotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a method for ameliorating the effects skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBB]-2 or IGFBB], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1, pityrissis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-MAR-2001
                                                                                                                                                                                                                                                                 Sequence 15 BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 7; Page 50; 201pp; English
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15
                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                            kidney disease, hyperproliferation of the or any other hyperplasia
                                                           TGATGCCCTTGGCAG 107
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                                                                                                                                                                                                                                                              A; 4 C; 4 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                               Score 11.8;
                                                                                                                                                                Pred.
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RESULT 53

US2002082225-A1

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RESULT 54
ABX00731/c
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Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             that has the same sequence as a mRNA found in humans and is a SAGE (serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon apancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer.
                                                                                                     Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection; HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide; liver failure; hepatocellular carriers, HCV infection; drug therapy; type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatotropic; antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human pancreatic cancer SAGE tag #128.
                                                     Hepatitis C virus.
                                                                                                                                                                                                                                                                                            Hepatitis
                                                                                                                                                                                                                                                                                                                                                    23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                          ABX00731
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX00731 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SAGE tags of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Col 77; 161pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New human nucleic acid containing specific SAGE tags, useful diagnostic markers for cancer, also derived probes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-APR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYJO ) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85 CATCGTCTTGATGCC 99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          analysis of gene expression; diagnostic; prognostic; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGGTCTTGAAGCC
                                                                                                                                                                                                                                                                                               C virus substrate #513 for HCV hammerhead ribozyme #513.
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                                                                                                                                                                                                                                                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               RNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 11.8; DB : Pred. No. 1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        purified human nucleic acid found in humans and is a SAGE
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Best Local S
Matches 13
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                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
                                  06-APR-2001; 2001WO-IB000713.
                                                                                              18-OCT-2001.
                                                                                                                                                    WO200177384-A2
                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 28033 for detecting SNP TSC0007915.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABC28016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABC28016 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 35; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 3 A; 5 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-617759/66.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
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) MCSWIGGEN J A.
) ROBERTS B.
) PAVCO P A.
) MACEJACK D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                        gastrointestinal; respiratory; immune; metabolic
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RESULT 56
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                                                      Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation, ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
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                                                                                                            07-APR-2000; 2000DE-01019173
                                                                                                                                                                   06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
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acid (PNA) oligomers for
and cytosine methylation
oligonucleotides are used
                                                                                                                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-2000; 2000DE-01019173
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                                                                                                                                                   Claim 1; SEQ ID NO 150364; 29pp + Sequence Listing; German.
                                                                                                                                                                                                               methylation status.
                                                                                                                                                                                                                                                                                                                                   WPI; 2001-657177/75.
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invention describes novel oligonucleotide primers or peptide nucleic (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) eyrosine methylation status in chemically pretreated genomic DNA. The conucleotides are used for diagnosis and/or prognosis of cancer and a
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Query Match Best Local Similarity

8.7**%**; 92.3**%**;

Score 11.4; Pred. No. 1.

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ABH33765/c
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                Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
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                                                                                                                                                                                                                                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide SEQ ID NO 233742 for detecting SNP TSC0057049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
ABC61347;
                                                    ABC61347 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                   Oligonucleotide SEQ ID NO 13519 for detecting SNP TSC0003124.
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Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and
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                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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RESULT 69
ABP50366/c
ID ABP503
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Best Local Similarity
Matches 12; Conserv
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                                                                                                                                                                                                                                                                                    acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABP00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                        Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 150363; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    methylation status.
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                                                                                                               Local Similarity
les 12; Conserv
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                                                                                                                        Conservative
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92.3%;
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                                                                                                                                                  Score 11.4;
Pred. No. 1
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                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for detecting SNP TSC0037941.
                                                                                                                                                     1.2e+02;
                                                                                                                                                                                  DB 1;
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밁 S

SNP; single

nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

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RESULT 70
ABC81417
ID ABC81
XX Claim
XX
RESULT 71
ABH00081
ID ABH00
XX
AC ABH00
XY
AC ABH00
DT 22-FE
XX
DE Oligo
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KW SNP;
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Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.       
                                                       Oligonucleotide SEQ ID NO 200058 for detecting SNP TSC0049230.
                                                                                                                                                                               ABH00081;
                                                                                                                                                                                                                                       ABH00081 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; peptide nucleic acid; cytosine methylation; central nervous system; gastrointestinal; re
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                                                                                                                     22-FEB-2002
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nilarity 92.3%;
Conservative
                                                                                                              (first entry)
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Pred. No. 1.2e+02;
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cardiovascular; primer;
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RESULT 72
ABF58084/c
ID ABF580
XX ABF580
XX ABF580
XX SNF:
DT 21-PEB
XX SNP:
DE Oligon
XX Homo B
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic solid (PWA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DWA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC9989, ABF00010-ABE9989, ABF00010-ABE9989, ABF00010-ABE9989, and MBI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide SEQ ID NO 158081 for detecting SNP TSC0006685
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                                  07-APR-2000; 2000DE-01019173
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No.
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RESULT 73
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomers are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Piepenbrock C,
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Pred. No. 1.2e+02;
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic Homo sapiens. Oligonucleotide SEQ ID NO 132340 for detecting SNP TSC0033015. ABF32343; ABF32343 standard; 21-FEB-2002 WO200177384-A2 (first entry) DNA; 13 ΒP metabolic

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Piepenbrock C,

Berlin

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AG.

WPI; 2001-657177/75

07-APR-2000; 2000DE-01019173 06-APR-2001; 2001WO-IB000713. 18-OCT-2001

Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.

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l typing, i

This invention describes novel oligonucleotide primers or peptide nucleic

Claim 1; SEQ ID NO 132340; 29pp + Sequence Listing; German

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RESULT 74
ABH01944/c
ID ABH019
XX ABH019
XX ABH019
XX Oligon
XX SNP; g
KW Peptid
KW Centra
XX Homo g
XX GEPIG-
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                                                                                                         acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABF0010-ABB99989, ABH0010-ABB99989 and ABI0010-ABB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Sequence 13 BP;

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RESULT 76 ABH02044/c ID ABH02044

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RESULT 75
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ID ABHOORO/C
ID ABHOORO
XX ABHOOR
XX SNP; s
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                                                 Query Match
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Matches 12; Conserv
                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                               Sequence 13
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mes 12; Conserv
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    TAATCTATCTAAA 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Piepenbrock C,
                                                                                                                                               BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
                                                    Conservative
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                                                                          8.7%;
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                                                                       Score 11.4;
Pred. No. 1.
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Pred. No. 1.2e+02;
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RESULT 77
ABP58085
ID ABP58
XX ABP58
XX ABP58
XX 21-FE
XX 21-FE
XX Oligc
XX SNP;
XW Pepti
XX Penti
XX Penti
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Best Local &
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                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 202021; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-APR-2000; 2000DE-01019173.
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                 Homo sapiens
                                                                                                                Oligonucleotide SEQ ID NO 158082 for detecting SNP TSC0006685.
                                                                                                                                                21-FEB-2002
                                                                                                                                                                                 ABF58085;
                                                                                                                                                                                                                ABF58085 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-APR-2001; 2001WO-IB000713.
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92.3%;
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bred, No. 1.2e+02;
cahes 1; Indels
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                                                imer; 88;
metabolic
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RESULT 78
ABC28017/c
ID ABC280
XX ABC280
XX ABC280
XX Oligon
XX SNP, s
KW Peptid
KW Centra
XX Centra
OS Homo s
XX WO2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gestrointestinal, respiratory, central nervous system, cardiovascular and metholic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99389, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 28034 for detecting SNP TSC0007915.
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                                                 Olek A,
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  WPI; 2001-657177/75
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92.3%;
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Pred. No. 1.
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L.2e+02;
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RESULT 79
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ID ABH206
XX ABH206
XX ABH206
XX Oligor
XX SNP; (X SNP; (X SNP; (X SNP) (X Centr)
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The
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                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
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                                                                                                                                                                                                                                             29pp + Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 1.2
); Mismatches
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                                                                                                                                                                                                                                             Listing;
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Query Match Best Local S Matches 12

Similarity

92.3%;

8.7%;

Score 11.4; DB 1; Pred. No. 1.2e+02;

Length 13;

Conservative

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Mismatches

Indels

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Gaps

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RESULT 8
ABH33764
ID ABH
XX ABH
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XX SNP
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Best Local
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                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABF00010-ABF9989, ABH00010-ABF9989, and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oligomers are also used for detecting cell type differentiation. ABC0 -ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, later than the obtained in electronic format from WIPO at the printed specification of the printed specification of the printed specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABH33764;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
                                                              was obtained in electronic format from W:
ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-FEB-2002
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ide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
ral nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 233741; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTAAATTATACCA 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTAAATTATACAA 1
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      вP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
      5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
      0 C; 4 G; 4 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               233741
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Pred. No. 1.
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          U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٥,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABC00010
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RESULT 81
ABH42900
ID ABH42
XX ABH42
XX ABH42
XX ABH42
XX OAH42
XX
        RESULT 82
ABC81416/c
ID ABC814
XX
AC ABC814
XX
AC ABC814
XX
DT 21-FEB
XX
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                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99389, ABF00010-ABF99389, ABH00010-ABH99389 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIFO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 242877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABH42900;
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                                         21-FEB-2002
                                                                                                 ABC81416;
                                                                                                                                                      ABC81416 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13 BP; 4 A; 1 C; 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            designed to detect methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-APR-2000; 2000DE-01019173
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                          TTATACGTGTAAT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTATAAGGTGA 17
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                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                     8.7%;
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                                                                                                                                                      ВP
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Pred. No. 1.2e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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RESULT 83
ABF44034/c
ID ABF44034; standard; DNA; 13 BF
XX
AC ABF44034;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 144
XX
DE Oligonucleotide seq in No 144
XX
DE Oligonucleic acid; cytosii
XX
SNP; single nucleotide polyma
XX
SNP; single nucleotide polyma
XX
Central nervous system; gast;
XX
PN W0200177384-A2.
XX
PD 18-OCT-2001.
XX
PD 18-OCT-2001.
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13 28

TAATCTATATAAA 1 TAATCTATCTAAA 40

ВP

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic

06-APR-2001; 2001WO-IB000713.

Oligonucleotide SEQ ID NO 144031 for

detecting

SNP TSC0036168

Query Match
Best Local Similarity
Matches 12; Conserv

Conservative

<u>.</u>

8.7%; 92.3%;

Score 11.4; DB 1; Pred. No. 1.2e+02; Mismatches

Length 13; Indels

0

Gaps

0

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
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metabolic
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RESULT 84
ABF94136/c
ID 9ABF941
XX ABF941
XX ABF941
XX Oligon
XX SNP; s
XW SNP; s
XW peptid
XW Centra
XX Homo s
XX Homo s
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                                                                                                      07-APR-2000; 2000DE-01019173
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                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 88;
                                                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 194133 for detecting SNP TSC0047740.
                                                                                                                                                                                                                                                          22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 13
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Pred. No. 1.
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RESULT 85
ABF94137
ID ABF94137
AC ABF94
ABF94137
ABF94
AC ABF94
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99899, ABH00010-ABH99899, and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 194134; 29pp + Sequence Listing; German.
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cardiovascular; primer;
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RESULT 86
ABH01200/c
ID ABH01
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Matches 12
                                                                                                                                                                                                                                                                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABP9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
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12; Conserv
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                                                                                                              Conservative
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92.3%;
                                                                                                                                         8.7%;
92.3%;
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                                                                                                                                                                                                                             G; 7
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Pred. No. 1.2e
0; Mismatches
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                                                                                                              Score 11.4; DB 1; Length 13; Pred. No. 1.2e+02; O; Mismatches 1; Indels
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                                                                                                                                                                                                                             0 U; 0 Other;
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cytosine
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RESULT 88
ABH20655
ID ABH20
XX ABH20
AC ABH20
XX ABH20
XX ABH20
XX ABH20
XX ABH20
XX Oliga
XX SNP,
XW Dept:
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Best Local S
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                             Oligonucleotide SEQ
                                                                                                                                                                                                                                                                                                                                                    Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;
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                                                                                          22-FEB-2002
                                                                                                                        ABH20655
                                                                                                                                                    ABH20655 standard;
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                                                                                                                                                    DNA;
                                                                                          entry)
                                                             ID NO 220632 for detecting SNP TSC0053697.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal

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RESULT 89
ABF972112/c
ID ABF972
XX ABF972
XX ABF972
XX SNP; a
KW Peptid
KW Centra
XX Homo 8
XX W Peptid
XX ABF972
XX Centra
XX Homo 8
XX Homo 9
XX
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                                                                                    07-APR-2000; 2000DE-01019173
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                                                                                                                                                                                                                                                                                                                                                                 single nucleotide polymorphism; human; diagnosis; PNA; caride nucleic acid; cytosine methylation; cardiovascular; prral nervous system; gastrointestinal; respiratory; immune;
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92.3%;
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RESULT 90
ABH42901/c
ID ABH429
XX ABH429
XX SNP; B
AC Oligon
XX SNP; B
KW peptid
KW centra
OS Homo s
PN WO2001
XX W02001
XX W02001
XX O6-APR
XX O6-APR
XX O18-OCT
XX O1ek p
PR 07-APH
XX O1ek p
PR WPI; 2
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                                                                                               Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
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                                                                Claim 1; SEQ ID NO 242878; 29pp + Sequence Listing; German
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                                                                                                                                                                                                                                                                                                                                                                                                                              central nervous system; gastrointestinal;
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92.3%;
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Pred. No. 1.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

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RESULT 91
ABH01201
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                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABC99989, ABF00010-ABC99989, and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                            Claim 1; SEQ ID
                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                         Olek A,
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                                                                                                                                                                                                                                                                                                                 methylation status.
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                                                                                                                                                                                                                                                                            NO 201178; 29pp + Sequence Listing; German.
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Pred. No. 1.2e+02;
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Query Match

Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;

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Score 11.4;

DB 1;

Length 13;

RESULT 93
ABH01945
ID ABH01
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AC ABH01

ABH01945 standard; DNA; 13

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ABH01945;

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RESULT 92
ABP13690/c
ID ABP136
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XX ABP136
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XX SUP;
B W Peptid
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                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABF00010-ABF9989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                    Sequence 13
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TCATCTATCTAAA 1
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                                                                                                                                                        Score 11.4; DB 1; Length 13; Pred. No. 1.2e+02; O; Mismatches 1; Indels
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                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                  Oligonucleotide SEQ ID NO 202022 for detecting SNP TSC0049666.
                 WO200177384-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13
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                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                  entry)
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                                                                                                                                                                                                                                                                                                                                                                               8.7%;
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                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                               Score 11.4; DB 1;
Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                              o.
                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 13;
                                                                          respiratory;
                                                                                                                                                                                                                                                                                                                                                                   Indels
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RESULT 95
AAT54959/c
ID AAT549
XX AAT549
XX AAT549
XX DT 07-APR
DT 07-APR
XX Enzyma
KW Enzyma
KW Enterc
KW Interc
KW INTer-al
KW TANS-1
KW Entans1
KW Entans2
KW Entans3
KW Entans3
KW Entans4
KW Enta
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Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                            Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; II-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndron
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
07-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT54959 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse relA hammerhead ribozyme target sequence (nt.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTGTAATCTATC 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTTTAATCTATC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202022; 29pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8.7%;
92.3%;
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Pred. No. 1.2e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7
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1;
                                                                                                                                                                                                                                                                                                                     deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  position 1588).
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31-AUG-1995

23-FEB-1995;

95WO-IB000156

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RESULT 96
AAT57042/c
ID AAT57
XX
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                                                                                                                                                                                                                                                                                                        CC The present sequence represents a preferred target sequence for an CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the CR nucleotide base position indicated in the DE line. The relA gene product is a subunit of the transcriptional regulator NF-kappaB and is implicated specifically in the induction of inflammatory responses. Regions of the CC mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified CC by computer analysis. Ribozymes directed against these mRNA sequences CC were designed and synthesised with modifications that improve their CC nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit relA expression, making them potentially cuseful for treating rheumatoid arthritis, restenosis and asthma as well can for increasing tolerance to transplanted tissues. The potential communosuppressive properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo treatment. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                Query Match
Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-PEB-1994

29-MAR-1994

04-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

16-AUG-1994

16-AUG-1994

17-AUG-1994

17-AUG-1994

19-AUG-1994

19-AUG-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

24-NOV-1994

01-NOV-1994

01-NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stinchcomb
Grimm S, K
Modak A, P
Tracz D, U
                      AAT57042
                                                                                                                                                                                                                                                                                                      Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ribozymes having modified bases and methods in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim
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                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                        15
                                                                                                                                                       CCTCTCTAGTAGA 60
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                      standard;
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Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DT, Chowrira B, Direnzo A, Draper KG, Dudycz Karpeisky A, Kisich K, Matulic-Adamic J, McSwi Pavco P, Beigleman L, Sullivan SM, Sweedler D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                    BP;
                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94US-00201109
94US-0022795
94US-0022795
94US-00228041
94US-00228041
94US-00245736
94US-00291932
94US-00291433
94US-00291433
94US-00291433
94US-00301000
94US-003011749
94US-00311749
94US-00311749
94US-00316717
94US-00316717
94US-00317608
94US-00317608
94US-00317608
94US-00317608
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                                                                                                                                                                                                                                                                                                      A; 4 C;
                                                                                                                                                                                                                                    8.7%;
                      15
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                                                                                                                                                                                                                Score 11.4; D
Pred. No. 1.1e
0; Mismatches
                                                                                                                                                                                                                  0
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                                                                                                                                                                                                                                    .1e+02;
                                                                                                                                                                                                                                                                                                      0 Other;
                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for producing them
                                                                                                                                                                                                                                                         Length 15;
                                                                                                                                                                                                                  Indels
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J, Mcswiggen JA;
Thompson JD;
                                                                                                                                                                                                                  0,
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                                                                                                                                                                                                                  Gaps
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15-APR-1994
18-MAY-1994
18-MAY-1994
16-JUL-1994
15-AUG-1994
16-AUG-1994
17-AUG-1994
17-AUG-1994
20-SEP-1994
23-SEP-1994
23-SEP-1994
23-SEP-1994
23-SEP-1994
10-OCT-1994
11-OCT-1994
11-OCT-1994
10-NOV-1994
10-NOV-1994
11-DCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-FEB-1994;
29-MAR-1994;
04-APR-1994;
07-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-ÁÚG-2003
25-MAR-2003
24-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IC-5; ICAM-1; intercellular adhesion molecule; rel A; turn necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; artoke; restrenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9523225-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Respiratory syncytial virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RSV 1C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT57042;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hammerhead ribozyme target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(revised)
(first en
                                                                                                                                                                                                                                     94US-00201109
94US-00218934
94US-0022795
94US-00228041
94US-00228041
94US-00245736
94US-00245736
94US-00291932
94US-0029133
94US-00291433
94US-0030000
94US-003011486
94US-00311749
94US-00311749
94US-00316771
94US-00316771
94US-00334516
94US-00334516
94US-00337507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95WO-IB000156.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  position 366)
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(RIBO-) RIBOZYME PHARM INC.

Stinchcomb Grimm S, K Modak A, Pa Tracz D, U DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson Usman N, Wincott FE, Woolf T; JD;

WPI; 1995-351090/45.

Ribozymes havi in inhibiting having modified ting disease rela Hed bases and methods related genes. for producing them

Claim <u>ک</u> Page 270; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not for a

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RESULT 97
AAT570
ID 70415/G
ID 70415/G
ID 70415/G
XX AAT577
XX AAT57
XX AAT57
XX BAT57
XX BAT57
XX RSV 1
DE RSV 1
XX Enzym
XX Enzym
XX Enzym
XX Enzym
XX Enzym
XX Enzym
XX Humann
XX Hielans
XX TNF-a
XX AT67
XX A
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Best Local S
Matches 12
                       08-SEP-1994;
23-SEP-1994;
23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
04-NOV-1994;
                                                                                                                                                                                                                      23-FBB-1994
29-MAR 1994
04-AFR-1994
07-AFR-1994
15-AFR-1994
15-AFR-1994
15-AFR-1994
16-AUG-1994
15-AUG-1994
16-AUG-1994
17-AUG-1994
19-AUG-1994
19-AUG-1994
19-AUG-1994
19-AUG-1994
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25-MAR-2003
24-APR-1997
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AAT57041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene expression, downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-AUG-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Respiratory syncytial virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RSV 1C hammerhead ribozyme target sequence (nt. position 364).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        numan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTAGTAGACCAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid; ribozyme; trans cleavage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 4 A; 2 C; 4
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(revised)
(first en
94US-00292620

94US-00293520

94US-0030000

94US-00303039

94US-00311486

94US-00311749

94US-00316771

94US-00316771

94US-0031993

94US-0031993

94US-00334847

94US-00334847

94US-00337608
                                                                                                                                                                                                                                                                                                   94US-00224483.
94US-00227958.
94US-00228041.
94US-00245736.
94US-00271280.
94US-0029133.
94US-00291433.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95WO-IB000156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 15,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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RESULT 98
AAX65300/c
ID AAX653
XX AAX653
AC AAX653
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Best Local S
Matches 12
23-DEC-1994;
23-DEC-1994;
17-FEB-1995;
20-APR-1995;
02-MAY-1995;
04-MAY-1995;
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16-DEC-1994;
23-DEC-1994;
30-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                      Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX65300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Grimm
Modak
Tracz
                                                                                                                                                     13-DEC-1994;
                                                                                                                                                                                                                                                                                                     WO9618736-A2
                                                                                                                                                                                                                                                                                                                                                                                                  diagnosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse B7-1 hammerhead ribozyme target SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ribozymes having modified bases and methods for in inhibiting disease related genes.
                                                                                                                                                                                                     22-NOV-1995;
                                                                                                                                                                                                                                                     20-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1995-351090/45.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      b DT, Chowrira B, Direnzo A, Draper KG, Dudycz Karpeisky A, Kisich K, Matulic-Adamic J, Mcswis Pavco P, Beigleman L, Sullivan SM, Sweedler D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                     88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 5 A; 2 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
  94US-00354920.
94US-00363253.
94US-00363254.
95US-00390850.
95US-00426124.
95US-00432874.
95US-00434509.
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94US-00357577.
94US-00363233.
95US-00380734.
                                                                                                                                                                                                     95WO-US015516.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8.7%;
92.3%;
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Pred. No. 1.1e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
..le+02;
les 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mcswiggen JA;
ler D, Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15;
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RESULT 99
AAX652
AAX652
XX AAX652
XX AAX652
XX AOUSE
AC AOUSE
XX MOUSE
XX AITHI
KW A
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Best Local Similarity
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07-JUL-1995;
07-AUG-1995;
05-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with rethnoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beigelman
Mcswiggen
Karpeisky
                                                                                                                                                                                                                                                                                      Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising (i) at least 5 ribose residues (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enzymatic nuc
                                 22-NOV-1995;
                                                                                                                                                                                                                                                                diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1931.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX65299 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-300653/30.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; S A; 4 C; 3 G; 0 T; 3 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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Gustofson J, U
Thompson JD, M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-0000951P.
95US-0000974P.
95US-00512861.
95US-00541365.
                                 95WO-US015516
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11.4;
No. 1.
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L.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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at least
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ARX31607/C
ID AAX316
XX AAX316
XX AAX316
XX AAX316
XX Tag se
XX AAX316
XX AA

21-MAY-1999

(first

entry)

Tag sequence of a transcript increased in pancreatic cancer

Tag sequence; colorectal cancer;
diagnosis; prognosis; treatment;

pancreatic cancer; colon cancer; ss.

WO9853319-A2

밁 S

AAX31607

standard;

DNA; 15

Matches

12;

Conservative

. .

Mismatches

87 15

TCGTCTTGATGCC 99

TCGTATTGATGCC 3

Query Match Best Local Similarity

8.7%;

Score 11.4; DB 1; Pred. No. 1.1e+02;

Length 15; Indels

<u>.</u>

Сарв

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The present invention describes a novel enzymatic nucleic acid (ENA) CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues CC; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's CC can inhibit collagenase and stromelysin production in the symovial CC membrane of joints for the treatment or prevention of arthritis, CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance CC in a recipient to an alloantigen of a donor. They can also be used for CC enhancing graft tolerance or for treating autoimmune disease, and for CC enhancing graft tolerance or for treating autoimmune disease, and for CC expression which accompany treatment with retinoids and dexamethasone. CC The concentration of ribozyme required to affect a thorapeutic treatment CC is lower than that required of antisense molecules, and is highly consecutive. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-JUL-1995;
07-JUL-1995;
07-AUG-1995;
05-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-APR-1995;
02-MAY-1995;
04-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-DEC-1994;
23-DEC-1994;
23-DEC-1994;
17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beigelman
Mcswiggen
Karpeisky
Sequence 15
                                                                                                                                                                                                                                                                                                                                           Claim 10;
                                                                                                                                                                                                                                                                                                                                                                           auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                        Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-300653/30.
                                present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RIBOZYME
                                                                                                                                                                                                                                                                                                                                           Page 179; 307pp;
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BP; 5 A; 4 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95US-00426124.
95US-00432874.
95US-00434509.
95US-0000951P.
95US-0000974P.
95US-00512861.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gustofson J, Thompson JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94US-00354920.
94US-00363253.
94US-00363254.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PHARM INC
                                                                                                                                                                                                                                                                                                                                           English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Usman
Modak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jarvis T, Draper K,
sman N, Wincott F, N
odak A, Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matulic-Adamic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pavco
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RESULT 101
AAF484
AC ID AAF484
XX AAF484
XX AAF484
XX AAT484
XX AAT486
DT 30-MAR
XX AAT486
KW Cytost
KW Cytost
KW Gytost
KW IGF bi
KW GYOWTH
KW HOPOTH
KW HOPOTH
KW HOOTH
KW H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
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Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                     Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX30947-31815 represent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
                                                               21-JUN-1999;
                                                                                                                         21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                                                     WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF48426 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis, pancreatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IGFBP3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Use of isolated gene transcripts - useful for developing products diagnosis, prognosis and treatment of cancers, particularly colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vogelstein B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-MAY-1997;
         (MURD-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VIND (OFAD)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          58
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           oligonucleotide #1846.
         MURDOCH CHILDRENS RES INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGACAATCCCGTG 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGACAATCCCATG 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prognosis cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 2 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kinzler KW;
                                                               99US-0140345P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0047352P
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92.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.4; DB 1;
Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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and
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RESULT 102
AAF48427/c
ID AAF484
XX AAF484
XX AAF484
XX AATISE
XX EYCOST
XW EYCOST
XW IGFMO
XX HOMO S
PN WO200C
XX HOMO S
YX WO200C
XX HOMO S
YX WO200C
XX 21-JUN
XX 21
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; cytostatic; lord; like Growth Factor; IGF-1; pityriasis; skin disorder; Insulin-like Growth Factor; lord; psoriasis; pilaris; IGF binding protein; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                  Wraight CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   keratosis; neoplasia; scleroderma; wart; skin con hyperneovascular condition; hyperplasia; kidney neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 5 A; 4 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to a method for ameliorating the effects skin disorders. The method comprises contacting the skin with an antiense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1
                                                                                                                                                                                                                                                                                                                                                                                           WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF48427 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                            21-JUN-2000;
                                                                                                                                                                                                                                                                                                                            28-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IGFBP3 oligonucleotide #1847.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83 AGCATCGTCTTGA 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12;
                                                                                                                                 MURDOCH CHILDRENS RES INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                            2000WO-AU000693
                                                                  Werther
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                99US-0140345P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8.7%;
                                                           GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ผ
                                                                     Edmondson SR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease;
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RESULT 103
AAP47618/c
ID AAP476
XX AAP476
XX AAP476
XX AAT188
C IGFBP3
XX AAT188
KW CYCOST
KW Skin c
KW IGF bi
KW Growth
KW Hyperr
KW hyperr
KW hyperr
KW NO2000
PN WO2000
PN WO2000
PN WO2000
PN WO2000
PF 21-JUN
XX 21-JUN
XX 21-JUN
XX AMS16
PT Wraigh
PT WY (u)
PT inhibi
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Best Local S
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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Example 7; Page

201pp;

inflammation.

JV (ultra-violet) treatment inhibits or reduces growth

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

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cc antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 cc receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, cc inflammation and/or other disorders. The present sequence is an cc oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the effects of psoriasis, cc f45161). The method is useful for ameliorating the effects of psoriasis, cichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, cc incoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition of the retina, cc brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia

Cc vessels or any other hyperplasia
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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; kelo skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityrlasi IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris growth factor mediated cell proliferation; ichthyosis; serborrhoea; rugrowth factor mediated cell proliferation; ichthyosis; serborrhoea; rugrowth factor mediated cell proliferation; ichthyosis;
                                                                                                                                                                                                                     AAF48425;
                                                                                                                                                                                                                                                           AAF48425 standard; DNA; 15
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                                                                                                                               IGFBP3 oligonucleotide #1845.
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RESULT 105
AAF48425/C
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XX AAF484
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XX AAT188
XX IGFBH3
XX I Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss. WPI; 2001-041421/05 21-JUN-1999; 21-JUN-2000; 2000WO-AU000693. WO200078341-A1 Homo sapiens. Ś MURDOCH CHILDRENS RES INST. Werther 99US-0140345P Edmondson SR

The present invention relates to a method for ameliorating the effects skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

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Example

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201pp; English

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RESULT 106
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Matches 12
                                                               The present invention relates to novel single nucleotide polymorphisms (SNPB) in the human growth hormone releasing hormone receptor (GHRHR) gene located on chromosome 7p14, and methods for haplotyping and/or genotyping the GHRHR gene. The methods of the invention make use of allele-specific oligonucleotides (ASOs) as probes and primers and/or primer-extension oligonucleotides for detecting the GHRHR gene polymorphisms. The polynucleotides and screened compounds are useful for the treatment of diseases associated with GHRHR activity, such as isolated growth hormone deficiency (IGHD) and pituitary adenomas. AAS19622-AAS19647 represent ASO primers for detecting human GHRHR gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genotyping human Growth hormone releasing hormone receptor gene of individual for determining haplotype of individual by determining identity of nucleotide pair at specific polymorphic sites for two copies
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  growth
                                      polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-066342/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-APR-2000; 2000US-0197978P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-APR-2001; 2001WO-US012453.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  allele-specific oligonucleotide; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ASO primer #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-MAR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GENA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; single nucleotide polymorphism; SNP; GHRHR; chromosome 7p14; growth hormone releasing hormone receptor; haplotyping; genotyping; isolated growth hormone deficiency; IGHD; pituitary adenoma; ASO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCATCGTCTTGA 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCTTCGTCTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Page 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 6 A; 4 C; 3 G; 2 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    detect human GHRHR gene polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Denton RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                             90pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8.7%;
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sausker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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RESULT 108
ABI21898/c
ID ABI218
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AC ABI218
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DT 22-FEB
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Best Local S
Matches 12
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                                                                                                                                                                                                                                   The invention relates to an isolated, purified human nucleic acid (I) that has the same sequence as a mRNA found in humans and is a SAGE (serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and propostic markers of cancer, especially of the colon and pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer SAGE tags of the invention
                                                                                                                                                                                                                                                                                                                                                        New human nucleic acid containing specific SAGE tags, useful diagnostic markers for cancer, also derived probes.
                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-153821/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   serial analysi 
cancer marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human pancreatic cancer SAGE tag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 5 A; 2 C; 6 G; 1 T; 0 U; 1 Other;
             22-FEB-2002
                                   ABI21898;
                                                           ABI21898 standard;
                                                                                                                                                                                                              Sequence 15 BP; 2 A; 2 C; 6
                                                                                                                                                                                                                                                                                                                                 Disclosure; Col
                                                                                                                                                                                                                                                                                                                                                                                                                  Vogelstein B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US6333152-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABK32561 standard; DNA; 15 BP
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                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                    13
                                                                                                                                        58 AGACAATCCCGTG 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             colon cancer; colorectal cancer; pancreatic cancer; SAGE tag; analysis of gene expression; diagnostic; prognostic; probe;
                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12;
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                                                                                                                    AGACAATCCCATG 1
                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8.7%;
ilarity 80.0%;
Conservative
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            (first entry)
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                                                                                                                                                                                                                                                                                                                               76; 161pp; English.
                                                                                                                                                                           8.7%;
92.3%;
                                                         DNA; 12 BP
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                                                                                                                                                                                                              G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                 Zhang
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                                                                                                                                                                           Score 11.4; DB 1;
Pred. No. 1.1e+02;
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1; Mismatches
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                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                   Zhou
                                                                                                                                                                                       DB 1;
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                                                                                                                                                                                       Length 15;
                                                                                                                                                                  Indels
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RESULT 109
ABH80958/c
ID ABH809
XX ABH809
XX OAH809
XX Oligon
XX Oligon
XX Oligon
XX Opeptid
KW SNP; 8
KW peptid
KW centra
XX Centra
XX OS Homo 8
XX

central nervous system;

06-APR-2001; 2001WO-IB000713.

18-OCT-2001 WO200177384-A2 Homo sapiens. Oligonucleotide primer SEQ ID NO 280951

for

detecting

SNP TSC0009274.

22-FEB-2002 **АВН80958**;

(first

entry)

ABH80958 standard;

DNA;

12

ΒP

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

gastrointestinal;

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Conservative

0;

Mismatches

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Query Match
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Matches 11; Conserv
                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01ek
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                       Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligonucleotide primer SEQ ID NO 321871 for detecting SNP TSC0030537.
                                                                                                                                                                                                                                                                                                                                             Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000DE-01019173.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200177384-A2
                                                                                                          ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (EPIG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 321871; 29pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Piepenbrock C,
                  8.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Berlin
                    Score 11;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                    DB 1; L,
1.3e+02;
                                   Length 12
                                                                                                                                                                                                                                                                                                                                                 German.
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RESULT 110

RESULT 110

RBI76786

ID ABI767

XX ABI767

XX SNP; g

KW SNP; g

KW Centra

XX Centra

XX Homo g

XX WO2001

XX WO1; 2

XX WPI; 2

XX WPI; 2

XX WPI design

PT design
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Best Local S
Matches 11
                  Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99889, ABF00010-ABB99899 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                   07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                    06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                   18-OCT-2001.
                                                                                                                                                                                                                                                                                     WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide primer SEQ ID NO 376759 for detecting SNP TSC0005783.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and
                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                    central nervous
                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABI76786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABI76786 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12 BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                     (EPIG-)
                                                                                   2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; SEQ ID NO 280951; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72 TAAATTATACC
                                                                                                                                                     EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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                                                                                                                  Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                   system; gastrointestinal; respiratory;
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G
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100.0%; Pr
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                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detection and metabolic disorders. The oligomers are also used for detection and metabolic disorders. ABC0010 -ABC99989, ABF00010-ABF99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                     Claim 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-657177/75
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                                                                                                                               acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
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                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 312318; 29pp + Sequence Listing; German.
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ftp.wipo.int/pub/published_pct_sequences
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Pred. No.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular; central nervous system; gastrointestinal; respiratory; immur

primer; cns;

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RESULT 115
ABI19205/c
ID ABI192
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                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                        07-APR-2000; 2000DE-01019173
                                                                                                                                              06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 12 BP; 4 A; 0 C; 4 G; 4 T; 0 U; 0 Other;
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                                 (EPIG-) EPIGENOMICS AG
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Pred. No. 1.3e+02;
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RESULT 116
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ID ABIO02
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XX SNP; as
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OS Homo s
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Matches 11; Conserv
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                                                                                                            Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 88;
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                                                                 Claim 1;
                                                                                               methylation status.
                                                                                                                                                              WPI; 2001-657177/75.
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                                                                 SEQ ID NO 300228;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

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ABIO4248
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                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABP00010-ABC9989, ABP00010-ABC99899, ABP00010-ABC9989, ABP00010-ABC99989, ABP00010-ABC99989, ABP00010-ABC99989, ABP00010-ABC99989, ABP00010-ABC99989, ABP00010-
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    Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTAAATTATAC 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 11;
Pred. No.
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Query Match

Score 11;

DB 1; Length 12;

ABH83435;

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RESULT 118
ABH88751/c
ID ABH887
XX ABH8877
AC ABH887
XX 22-FEB
XX SNP;
KW SNP;
KW Peptid
XX Centra
XX WO2001
XX Centra
XX O7-APR
XX WPI;
ZY Olek A
XX WPI;
ZY Olek A
XX WPI;
ZY Olek A
XX WPI;
ZY Claim
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RESULT 119
ABH83435
ID ABH834
XX
AC ABH834
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Best Local Similarity
Matches 11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH99899, and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-APR-2000; 2000DE-01019173
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABH88751 standard; DNA; 12
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 288744; 29pp + Sequence Listing; German
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                                                        ABH83435 standard; DNA; 12
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                                                                                                                                                                                                    12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H
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                                                                                                                                                                                                                                                             GTATAAGGTGA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAMATTATAC 11
                                                                                                                                                                                                    GTATAAGGTGA
                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 4 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                          8.4%; Score 11; DB 1;
100.0%; Pred. No. 1.3e+0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gastrointestinal; respiratory; immune; metabolic.
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                                                           B₽.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP
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); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ~
                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                   1.3e+02
                                                                                                                                                                                                                                                                                                                                                                        Length 12
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s and
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i cytosine
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RESULT 120
ABI71223/c
ID ABI712
XX ABI712
XC ABI712
XY 22-FEB
XX Oligon
XX SNP; 8
KW SNP; 8
KW peptid
KW centra
XX Centra
XX SNB Homo 8
XX WO2001
XX
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Best Local S
Matches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI;
                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                        Oligonucleotide primer SEQ ID NO 371196 for detecting
                   WO200177384-A2
                                                Homo sapiens.
                                                                            central nervous
                                                                                                                                                                        22-FEB-2002
                                                                                                                                                                                                      ABI71223;
                                                                                                                                                                                                                                   ABI71223 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 283428; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-OCT-2001
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                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                          TCTATCTAAAC 12
                                                                                                                                                                                                                                                                                                                                                                                                                                       12
                                                                                                                                                                                                                                                                                                                                          TCTATCTAAAC 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 4 A; 4 C; 0
                                                                                                                                                                     (first entry)
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                                                                            system;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer SEQ
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                                                                                                                                                                                                                                   DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                        8.4%;
                                                                                                                                                                                                                                   12
                                                                         ytosine methylation; cardiovascular; primer; ss; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Berlin
                                                                                                                                                                                                                                     BP
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                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                     G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                        Score 11; DB 1; Length 12; Pred. No. 1.3e+02;
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                                                                                                                                         SNP TSC0058640.
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RESULT 121
ABI70151/c
ID ABI701
AC ABI701
XX ABI701
XX SNP; B
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XX Gentra
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Best Local S
Matches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         range of diseases including immune system, gastrointestinal, respirator central nervous system, cardiovascular and metabolic disorders. The cligomers are also used for detecting cell type differentiation. ABC000-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, buwas obtained in electronic format from WIPO at
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                                                     WPI; 2001-657177/75.
                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173
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                                                                                                                                                                                                                                                                                                                              18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide primer SEQ ID NO 370124 for detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABI70151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABI70151 standard; DNA; 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       designed to detect methylation status.
                                                                                                                                                                                                                                                                                                                                                                                WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     central nervous system; gastrointestinal; respiratory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 12 BP; 5 A; 0 C; 3 G; 4 T; 0 U; 0 Other;
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                                                                                                          Piepenbrock C,
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hes 0;
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of oligonucleotides,

useful for diagnosis and cell typing,

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RESULT 122
AB13058
ID AB1305
XX AB1305
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XX Oligon
XX SNP; &
KW Peptid
KW Centra
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99889, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 330562; 29pp + Sequence Listing; German.
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Matches Query Match Best Local

Similarity

8.4%;

Score 11; DB 1; I Pred. No. 1.3e+02; Mismatches

Length 12 Indels

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RESULT 123
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ID ABI399
XX ABI399
XX ABI399
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XX PEB
DT 22-FEB
XX Peptid
XX SNP; W Peptid
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                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        designed to methylation
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. 1.3e+02;
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RESULT 124
ABH83015
ID ABH830
XX ABH830
XX ABH830
XX ABH830
XX SNP; g
KW SNP; g
KW Peptid
XX SNP; g
KW Centra
XX Homo g
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XX Homo g
XX Homo g
YX Set on g
YX Set on g
YX Homo g
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ABH86779/c
SEXEXEX EX
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Best Local S
Matches 11
                     Oligonucleotide primer SEQ
                                                                                                                                                                                                       ABH86779 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                    22-FEB-2002
                                                                                                                                               ABH86779;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 283008; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide primer SEQ ID NO 283008 for detecting SNP TSC0011092.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABH83015;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                (first entry)
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                        286772 for detecting SNP TSC0012815
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, ABH001010-ABF9989, ABH00010-ABF9989, ABH00010-ABF9989, ABH001010-ABF9989, ABH001010-ABF99989, ABH00101
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metabolic.
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Ş Query Match Best Local & Matches Sequence 12 BP; 4 A; 0 C; 2 G; 6 T; 0 U; 0 Other; ftp.wipo.int/pub/published_pct_sequences Local Similarity 72 TAAATTATACC 82 11; TAAATTATACC 1 Conservative 8.4%; Score 11; 100.0%; Pred. No. 0 Mismatches DB 1; L Length 12 Indels 0; Сарв 0

밁 11 ₽₽

21-FEB-2002 ABC69069 ABC69069 standard; DNA; 13 (first entry)

Oligonucleotide SEQ ID NO 69086 for detecting SNP TSC0017981

RESULT 126
ABC69069
ID ABC690
XX ABC690
XX ABC690
XX D1:FEB
XX Oligon
XX SNP; E
KW Peptid
KW centra
XX Centra
XX Homo E
XX HOMO F
PR 06-APE
XX O6-APE
PR 07-APE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal 06-APR-2001; 2001WO-IB000713. metabolic.

07-APR-2000; 2000DE-01019173.

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RESULT 127
ABF05684/c
ID ABF056
XX
ABF0566
XX
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Best Local !
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin methylation status.
                                                                                                                                                                                                                                                               Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 105681 for detecting SNP TSC0026488.
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Pred. No. 1.3e+0
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                                                                               range of diseases including immune system, gastrointestinal, respirator central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC000-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, buwas obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
Sequence 13 BP; 6 A; 0 C; 2 G; 5 T; 0 U; 0 Other;
                                                    ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                 respiratory,
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                                    Query Match
Best Local Similarity
Matches 11, Conserv
                  72
12 TAAATTATACC 2
                 TAAATTATACC 82
                                     Conservative
                                             8.4%; Score 11;
100.0%; Pred. No.
                                     0
                                      Mismatches
                                              DB 1; L
1.3e+02;
                                      0
                                                        Length
                                      Indels
                                     0,
                                      Gaps
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RESULT 128
ABC87292
                                                                                          ABC87292 standard; DNA; 13
Oligonucleotide SEQ
                               21-FEB-2002
                                                            ABC87292;
                               (first entry)
ID NO 87309
for detecting SNP TSC0021951
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic

Homo sapiens. WO200177384-A2.

06-APR-2001; 2001WO-IB000713:

18-OCT-2001

07-APR-2000; 2000DE-01019173. (EPIG-) EPIGENOMICS a ଜ

01ek A, Piepenbrock C, Berlin

WPI; 2001-657177/75.

methylation status. designed to of oligonucleotides, onucleotides, useful for diagnosis and cell typing, detect single-nucleotide polymorphisms and cytosin cytosine

Claim 1; SEQ ID NO 87309; 29pp + Sequence Listing; German

range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a ftp.wipo.int/pub/published_pct_sequences

Claim 1; SEQ

ID NO 105681; 29pp + Sequence Listing; German

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                                                                                                                                                                 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cyrcosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABF00010-ABH99989, ABH00010-ABH99989 and ABH00010-ABH9989 and Format the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                  Sequence 13 BP; 4 A; 4 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                        Claim 1;
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                                                                                                  Local Similarity
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                                            AGTATAAGGTG 3
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                                                                  AGTATAAGGTG 16
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Pred. No. 1.3e+02;
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Pred. No. 1.3e+02;
0; Mismatches 0;
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RESULT 131
ABF17819
ID ABF178
XX
AC ABF178
XX
DT 21-FEB
DT 21-FEB
XX
Oligon
XX
SNP; 8
KW SNP; 8
KW SPPLId
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                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer;
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RESULT 130 ABF16585/c

Homo sapiens

nervous system; gastrointestinal; respiratory; immune;

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Query Match
Best Local S
Matches 11
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Oligonucleotide SEQ ID NO 117816 for detecting SNP TSC0029452
                                                                                                                                                                                                                                                                                                               Sequence 13
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                                21-FEB-2002
                                                                 ABF17819
                                                                                                 ABF17819 standard; DNA; 13
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                                                                                                                                                                                  GAGTATAAGGT
                                                                                                                                                                                                                                                8.4%; Score 11; ilarity 100.0%; Pred. No. Conservative 0; Mismatcl
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RESULT 132
ABF23104/c
ID ABF231
XX ABF231
XX ABF231
XX SNP; s
KW SNP; s
KW Peptid
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XX Homo £
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Matches 11
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                            Olek A,
                                                                                                                                                                                                                                                                                                     WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide
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Pred. No. 1.3e+02;
1; Mismatches 1
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RESULT 133
ABF31691
ID ABF316
AC ABF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ
                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                  Claim 1; SEQ ID NO 131688; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                          designed to methylation
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ide nucleic acid; cytosine methylation; cardiovascular; primer;
ral nervous system; gastrointestinal; respiratory; immune; metal
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a

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RESULT 134
ABC69068/c
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CO Oligon
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                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                 Sequence 13 BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 69085; 29pp + Sequence Listing; German.
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                                 1.3e+02;
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RESULT 135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Piepenbrock C,
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ilarity 100.0%;
Conservative (
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Pred. No. 1.3e+02;
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21-FEB-2002 ABF57605;

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RESULT 137
ABH10656
ID ABH106
XX ABH106
XX ABH106
XX D1190r
XX SNP; KW Peptic
KW Centra
XX Centra
XX OS Homo (
XX OS HOMO 
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Matches 11
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                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular;
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                                    18-OCT-2001
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                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                        system; gastrointestinal; respiratory;
                                                                                                                                                                                                                                                                                                                        SEQ ID NO 210633 for detecting SNP TSC0051423
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RESULT 138
ABH37264/c
ID ABH372
XX ABH372
XX ABH372
XX SNP; G
E Oligon
XX SNP; G
KW Septid
KW Centra
XX Homo E
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  Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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ftp.wipo.int/pub/published_pct_sequences
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RESULT 139
ABH03008/c
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XX ABH030
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XX SNP; g
XW peptid
XW Centra
XX SNP; g
XW Centra
XX HOMO g
XX Claim
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                                                                                                                                                                                  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
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                             range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence
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                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
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                                                                                                                                                                                                                                                                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99389, ABF00010-ABF99389, ABH00010-ABF99389, ABH00010-ABF99389 and ABI00010-ABF3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                  Sequence 13
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ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 68546; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          methylation status.
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RESULT 141
ABF39158/c
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XX ABF391
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XX SNP; a
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XX W
RESULT 142
ABH36296/c
ID ABH362
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AC ABH362
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XZ
ZZ-FEB
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DT 22-FEB
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DE Oligon
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer;
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                                                                                       Oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                 07-APR-2000; 2000DE-01019173.
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central nervous
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; ide nucleic acid; cytosine methylation; cardiovascular; primer; ss; ral nervous system; gastrointestinal; respiratory; immune; metabolic
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                                                                                     Claim 1; SEQ ID NO 164312; 29pp + Sequence Listing; German
                                                                                                                                                designed to detect methylation status.
                                                                                                                                                                           Set of oligonucleotides, useful for a designed to detect single-nucleotide
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invention describes

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novel oligonucleotide primers or peptide nucleic detecting single nucleotide polymorphisms (SNP)

Sequence 13

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Matches 11
                                                                               This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABP00010-ABH9989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the subscribed in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ
                                                        ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 44393; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-657177/75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 3 A; 5 C; 1 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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Pred. No.
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DB 1; Length 13;

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RESULT 146
ABH37001
ID ABH370
XX ABH370
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XX SNP; sellon
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                                                                                    RESULT 147
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Matches 11
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Best Local S
Matches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosts and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation, ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                           ABH37265 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 13 BP; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 236978; 29pp + Sequence Listing; German
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                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                      A; 1 C; 0 G; 5 T; 0 U; 1 Other;
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Pred. No.
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hes 0;
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RESULT 148
ABF23810/C
ID ABF238
XX ABF238
XX ABF238
XX 21-FEB
XX 21-FEB
XX Oligon
XX SNP;
B KW SPF;
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Best Local Similarity
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                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 designed to detect methylation status.
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                                                                                                                            Oligonucleotide SEQ ID NO 123807 for
                                                                                                                                                                                             ABF23810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 237242; 29pp + Sequence Listing; German.
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                               Ното варіелв.
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Pred. No. 1.3e+02;
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RESULT 149
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Best Local Similarity
Matches 11; Conserv
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                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
          WPI; 2001-657177/75
                                   Olek A,
                                                                                      07-APR-2000; 2000DE-01019173
                                                                                                              06-APR-2001; 2001WO-IB000713
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                                                                                                                                                                                                                 central nervous
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RESULT 150
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XX ABF365
XX ABF365
XX Oligon
XX SNP; g
KW peptid
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Matches 11
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Pred. No.
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single nucleotide polymorphism; human; diagnosis; PNA; cancer; ide nucleic acid; cytosine methylation; cardiovascular; primer; sapiens nervous system; gastrointestinal; respiratory; immune; metabolic.

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18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS Ą

Piepenbrock C, Berlin ×

2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation cytosine typing,

Claim 1; SEQ ID NO 136565; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The for detecting cell type

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RESULT 151
ABF36569
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Query Match
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                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABP00010-ABP99989, ABH00010-ABP99989, ABH00010-ABP99989, ABH00010-ABP99989, ABH00010-ABP99989, ABH00010-ABP99989, ABH00010-ABP99989, ABP00010-ABP9989, ABP00010-ABP9989, ABH00010-ABP9989, ABP00010-ABP9989, ABP00010-ABP9998, ABP00010-ABP99998, ABP00010-ABP9998, ABP00010-ABP9998, ABP000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 136566; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
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                                                                                               Sequence 13 BP; 5 A; 2 C; 0 G; 6 T; 0 U; 0 Other;
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Pred. No. 1.3e+02
                       Score 11; DB 1; L
Pred. No. 1.3e+02;
  Mismatches
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ATCTATCTAAA 40

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RESULT 152
ABH22530
ID ABH225
XX ABH225
XX ABH225
XX Oligon
XX SNP; s
KW peptid
KW centra
XX Homo s
XX Coligor
CC Tange c
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CC Garda s
CC Tange c
CC Garda s
CC Garda s
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CC Garda f
CC Garda s
CC GARCA s
CC G
RESULT 153
ABC44377
ID ABC443
XX
AC ABC443
AC ABC443
XX
DT 21-FEE
XX
DE Oligor
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      Oligonucleotide SEQ ID NO 44394 for detecting SNP TSC0013032.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                ABC44377;
                                                                                                                                                                                          ABC44377 standard; DNA; 13
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                                                                   21-FEB-2002
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RESULT 154
ABC88333/c
ID ABC883
XX ABC883
AC ABC883
AC ABC883
XX SNP; E
KW SNP; E
KW Peptic
KW Centra
XX SNP; E
KW Centra
XX SNP; E
KW OCO001
XX WO2001
XX WO2001
XX WO2001
XX Y
PF 06-API
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                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
                    06-APR-2001; 2001WO-IB000713.
                                                                                    WO200177384-A2
                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                    Oligonucleotide
                                                                                                                                                                                                                                                                                                                   ABC88333 standard;
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                                                                                                                                                                                                                                                                                  ABC88333;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                    SEQ
                                                                                                                                                                                                                                                                                                                   DNA;
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                                                                                                                                                                                                                 ID NO 88350 for detecting SNP TSC0022204.
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Pred. No.
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                                                                                                                                                                                                                                                               Sequence 13
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   TATATTTGTAATY 1
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nilarity 84.6%;
Conservative
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Pred. No.
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RESULT 155
ABH17450
ID ABH174
XX ABH174
XX ABH174
XX SNP; BE
COLIGOR
XX SNP; BE
KW PEPTIG
KW CERTIC
XX HOMO E
PN WO2001
XX WO2001
XX (EPIG-
XX Olek I
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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

07-APR-2000; 2000DE-01019173

EPIGENOMICS

A,

Piepenbrock C,

Berlin

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2001-657177/75.

06-APR-2001; 2001WO-IB000713

18-OCT-2001 WO200177384-A2

Claim 1; SEQ ID NO 217427;

29pp + Sequence Listing; German

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RESULT 156
ABP69633/c
ID ABP696
XX ABP6966
XX ABP69666
XX ABP69666
XX ABP69666
XX ABP6966
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X
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                      Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin methylation status.
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Pred. No. 1.3e+02;
1; Mismatches 1;
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                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                         Sequence 13
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Pred. No.
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                                                        Mismatches
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RESULT 158

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ABF17818/c
ID ABF17818 standard; DNA; 13 BF
XX
AC ABF17818;
XX
DT 21-FEB-2002 (first entry)
XX
SNP; single nuclectide polymm
kW snp; single nuclectide polymm
peptide nucleic acid; cytosis
XX
SNP; single nucleotide polymm
XX
HOMMO sapiens.
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                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 1.3e+02;
1; Mismatches 1
                                                                                                                                             for detecting SNP TSC0036845
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RESULT 160
ABC68528/c
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XX ABC685
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XX SNP; S
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XW peptid
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RESULT 161
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                        methylation status.
                                                                                                                                                                                                                                   Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
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RESULT 162
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                                                                                   This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABF00010-ABH99989 and ABI00010-BBI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Pred. No. 1.3e+02;
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Query Match Best Local Similarity

8.4%;

Score 11; Pred. No.

DB 1; L 1.3e+02;

Length

13;

Sequence

13

BP;

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4 C; 1 G; 3 T; 0 U; 0 Other;

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RESULT 163
ABH10657/c
ID HABH106
XX ABH106
XX ABH106
XX Oligon
XX SNP;
KW Peptid
XX SNP;
KW Peptid
XX Centra
XX SNP;
KW POOLAPI
XX O1-API
CC O1-AP
RESULT 164
ABF64314
ID ABF643
XX
AC ABF643
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABC9989, ABF00010-ABC9989, BH00010-ABC9989, BH00010-ABC9989, BH00010-BC9989, BH00010-BC9989, BH00010-BC9989, BC9989, BC99899, BC9989, BC9989, BC99899, BC99899, BC9989, BC99899, BC998999, BC99899, BC99
                                         ABF64314;
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Pred. No. 1.3e+02;
1; Mismatches 1
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RESULT 165
ABC29300/c
ID ABC293
XX ABC293
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                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                            Oligonucleotide SEQ ID NO 29317 for detecting SNP TSC0008650.
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                                                      WO200177384-A2
                                                                                                            Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                        ABC29300;
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RESULT 166
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                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular; central nervous system; gastrointestinal; respiratory; immur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin
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Pred. No. 1.3e+02;
1; Mismatches 1
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RESULT 167
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detectinal and metabolic disorders. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence
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RESULT 168
ABF29060/c
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XX SNP; B
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RESULT 169
RESULT 169
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ID ABF391
XX ABF391
XX SNP; B
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ID ABH174
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VX
SNP; 8
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Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                  Oligonucleotide SEQ ID NO 217428 for detecting SNP TSC0052875.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer;
                                                                                                                                                                                                ABH17451;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 139156; 29pp + Sequence Listing; German.
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ilarity 100.0%; Pred. No. 1.3e+02;
Conservative 0; Mismatches 0;
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                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 219248 for detecting SNP TSC0053308
               07-APR-2000; 2000DE-01019173
                                            06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                             22-FEB-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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                                                                                                                                             Homo sapiens
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 1.3e+02;
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                                                                                                                                                 Olek A,
                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
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                             Claim 1; SEQ ID NO 169630; 29pp + Sequence Listing; German
                                                          designed to methylation
                                                                        Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Olek A,
                                                                                                                     WPI; 2001-657177/75.
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                                                                                                                                                                                                                                                                                                                              sapiens.
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                                                          detect single-nucleotide status.
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This invention describes novel oligonuclectide primers or peptide nucleic

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RESULT 173
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Matches 11
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                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99898, ABF00010-ABF99898, ABF00010-ABF9989, ABF00010-ABF99898, ABF00010-ABF99898, ABF00010-ABF99898, ABF00010-ABF99898, ABF00010-ABF99898, ABF00010-ABF99898, ABF00010-ABF99898, ABF00010-ABF99898, ABF00010-ABF9989894, ABF00010-ABF99989, ABF00010-ABF999894, ABF00010-ABF999894944, ABF00010-ABF999894944, ABF00010-ABF999894944, ABF00010-ABF999894944, ABF00010-ABF999894944, ABF00010-ABF999894984, ABF00010-ABF999894944, ABF00010-ABF99989498949894984, ABF00010-ABF999894984, ABF00010-ABF999894, ABF00010-ABF999894, ABF00010-ABF999894984, ABF00010-ABF99989894, ABF00010-ABF999894, ABF00010-ABF999894, ABF00010-ABF99989499894, ABF00010-ABF999894, ABF00010-ABF999984, ABF00010-ABF9999894, ABF00010-ABF9999894, ABF00010-ABF9999999894, ABF00010-ABF99999894, ABF00010-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   central nervous
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 169718; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Olek A,
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100.0%; Pr
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o. 1.3e+02;

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Sequence 13 BP; 4 A; 4 C; 0 G; 4 T; 0 U; 1 Other;

RESULT 175 ABH37000/c ID ABH37000 standard; DNA; 13

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RESULT 174
ABF57604/c
ID ABF576
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XX SNP; B
DT Oligon
XX SNP; B
KW Peptid
KW Centra
XX SNP; B
KW PO2001
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XX Centra
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      AAATTATACCA 83
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RESULT 176
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XX ABPO56
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                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                  Oligonuclectide SEQ ID NO 105682 for detecting SNP TSC0026488.
                                                                                                                                                                                      ABF05685;
                                                                                                                                                                                                                     ABF05685 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13 BP; 5 A; 0 C; 1 G; 6 T; 0 U; 1 Other;
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Pred. No. 1.3e+02
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metabolic
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RESULT 177
ABC87293/c
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XX SNP; B
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                                                  Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide SEQ ID NO 87310 for detecting SNP TSC0021951.
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
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RESULT 178
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ID ABF165
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XX SNP; as KW peptid
KW centra
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The
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                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 116581; 29pp + Sequence Listing; German.
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1.3e+02;
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                                                                                 range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a coligonucleotides are used for diagnosis and/or prognosis of cancer and a coligonucleotides are used for diagnosis and/or prognosis of cancer and a coligonucleotides.
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Best Local Similarity 84.6%;
Matches 11; Conservative
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                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
                                                                                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 236274 for detecting
                                                                                                                                                                                                                                                                                                                                                                                                                           ABH36297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABH36297 standard; DNA; 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-APR-2000; 2000DE-01019173.
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                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                 central nervous system; gastrointestinal;
                                                                                                                                                                                                                                                                                                                                                                          22-FEB-2002
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Pred. No. 1.3e+02
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                                                                                                                                                                                                                 respiratory; immune;
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RESULT 183
ABF64311/c
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XX ABF643
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Matches 11
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                                      Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                 Berlin K;
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                                                                                                                                                             Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;
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127.594 Million cell updates/sec
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US-09-164-249B-16
US-08-182-968A-491
US-09-064-156A-491
US-09-081-646-679
US-08-334-847-90
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US-08-38-684B-793
US-08-585-684B-793
US-08-388-073-794
US-09-038-073-794
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US-09-038-073-797
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Sequence 6, Appli
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                                                                                                                   54, Appli
54, Appl
70, Appl
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-443-957-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: PCT/EP00/01595
PRIOR FILING DATE: 2000-02-25
PRIOR APPLICATION NUMBER: DE 199 09 156.0
PRIOR FILING DATE: 1999-03-02
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 24; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/09857063 Patent No. 6579681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Achsel, Tilmann
APPLICANT: Vornlocher, Hann-Peter
TITLE OF INVENTION: Test System for Detect
FILE REFERENCE: 199at 01.us (8602*34)
CURRENT APPLICATION NUMBER: US/09/857,063
CURRENT FILING DATE: 2001-08-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Huls,
APPLICANT: Baue
APPLICANT: Sima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 40
                                                                                                                                                                                                  COMPUTER: IBM
OPERATING SYSTEM: MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08)
                                                       CLASSIFICATION: 435
PRIOR APPLICATION UNMER: 08/134,028
PRILING DATE: 10 OCTOBER 1993
APPLICATION NUMBER: 07/714,131
PILING DATE: 10-JUNE-1991
                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: HIGH-AFFINITY NUCLEIC ACID LIGANDS TITLE OF INVENTION: DISCRIMINATE BETWEEN THEOPHYLLINE A TITLE OF INVENTION: CAFFEINE NUMBER OF SEQUENCES: 37
                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                               STREET: 8400 E. Prentice Avenue, Suite CITY: Englewood STATE: Colorado COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICATION NUMBER: FILING DATE: 11-JUN
                                                                                                                                                                                       FILING DATE:
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Luhrmann, keil
Lool, Tilmann
Hang
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Robert Jenison
Larry Gold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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  11-JUNE-1990
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                      07/536,428
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Pred. No. 0
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Mismatches

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Gaps

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DB

Length 40; Indels

Result

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800

Kb storage

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RESULT

Minimum Maximum

80 80

eq eq

Searched:

Scoring table: Sequence: Perfect score:

Database

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INFORMATION FOR SEQ ID NO: 3'
SEQUENCE CHARACTERISTICS:
LENGTH: 38 base pairs
TYPE: nucleic acid
TYPE: single
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Best Local Similarity 60.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 33,215
REFERENCE/DOCKET NUMBER: NEX
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 793-333
TELEPAX: (303) 793-3433
INFORMATION FOR SEQ ID NO: 29:
                                                                                                  PRIOR APPLICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/134,028

PILING DATE: 10 OCTOBER 1993

APPLICATION NUMBER: 07/714,131

PILING DATE: 10-JUNE-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/536,428

PILING DATE: 11-JUNE-1990

ATTORNEY/AGENT INFORMATION:

NAME: BAITY J. SWANSON

REGISTRATION NUMBER: 33,215

REFERENCE/DOCKET NUMBER: NEX11

TELECOMMUNICATION INFORMATION:

TELEPHONE: (303) 793-333

TELEPHONE: (303) 793-333

TELEPAX: (303) 793-333

TELEPAX: (303) 793-333
                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 80
COMPUTER: IBM
OPERATING SYSTEM: MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/443,957
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Barry Polisky
APPLICANT: Robert Jenison
APPLICANT: Larry Gold
TITLE OF INVENTION: HIGH-AFFINITY NUCLEIC ACID LIGANDS THAT
TITLE OF INVENTION: DISCRIMINATE BETWEEN THEOPHYLLINE AND
TITLE OF INVENTION: CAFFEINE
NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 42 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: Bruch
CITY: Englewood
CTATE: Colorado
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ZIP: 80111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
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8400 E. Prentice Avenue, Suite 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. Swanson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diskette, 3.5 inch, 800 Kb storage
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                                                                                                                                                                           TELEFAX: (303) 793-333:
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 base natural type.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 5580737
GENERAL INFORMATION:
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                                                                Matches
                                                                              Query Match
Best Local Similarity
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: MS-DOS
SOFTWARE: WordDerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/443,95
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION UNMBER: 08/134,028
FILING DATE: 10 OCTOBER 1993
APPLICATION NUMBER: 07/714,131
                                                                                                                                                                                                                                                                                                         FILING DATE: 10-JUNE-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/536,
FILING DATE: 11-JUNE-1990
ATTORNEY/AGENT INFORMATION:
NAME: Barry J. Swanson
REGISTRATION NUMBER: 33,215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
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MEDIUM TYPE: Diskett
COMPUTER: IBM
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TITLE OF INVENTION: CAFFEINE
                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: NE
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                          LENGTH: 40 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Englewood
STATE: Colorado
                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
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3 UGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG 34
                  76 TTATACCAGCATCGTCTTGATGCCCTTGGCAG 107
                                                                22; Conservative
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2 UGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG 33
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8400 E. Prentice Avenue, Suite
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Robert Jenison
Larry Gold
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                                                                            23.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIGH-AFFINITY NUCLEIC ACID LIGANDS THO DISCRIMINATE BETWEEN THEOPHYLLINE AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/443,957
                                                              9; Mismatches
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                                                                               Score 30.4; DB 1;
Pred. No. 0.42;
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Pred. No. 0.4;
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                                                                                             Length 40;
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RESULT 5 US-08-319-492B-449/c

Sequence 449, Application US/08319492B

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                  GENERAL INFORMATION:
APPLICANT: Chetverin, Alexander B.
APPLICANT: Kramer, Fred Russel
APPLICANT: Kramer, Fred Russel
TITLE OF INVENTION: NOVEL OLIGONUCLEOTIDE ARRAYS AND THEIR USE FOR SORTING,
TITLE OF INVENTION: ISOLATING, SEQUENCING, AND MANIPULATING NUCLEIC ACIDS
FILE REFERENCE: 07763-004003
CURRENT APPLICATION NUMBER: US/09/164,249B
CURRENT FILING DATE: 1998-09-30
                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                        Sequence 16, Application US/09164249B
Patent No. 6322971
                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/319,492B

FILING DATE: October 7, 1994

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below:
APPLICATION UNMBER: 08/008,995

FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Sullivan, Sean M.
APPLICANT: Draper, Kenneth G.
APPLICANT: MCSWiggen, James
APPLICANT: Stinchcomb, Dan T.
TITLE OF INVENTION: OR CONDITIONS RELATED TO LEVELS
TITLE OF INVENTION: OF CONDITIONS RELATED TO LEVELS
TITLE OF INVENTION: OF IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 209/276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Lyon & Lyon STREET: 633 West Fifth Street STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Word Perfect 5.1
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                                                                                                                                                                                                                                                                                                                                31 TCTATCTAAACGGG 44
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                                                                                                                                                                                                                                                                                            TCTATCTAAAGGGG 2
TION NUMBER: US 08/473,010
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Pred. No. 13;
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                                                                    US-08-182-968A-491
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 491, Application US/08182968A Patent No. 5610054 GENERAL INFORMATION:
Query Match 9.0
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: IBM P.C. DOS
OPERATING SYSTEM: IBM P.C. DOS
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/182,:
FILING DATE: 13-JANUARY-1994
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 07/882,888
FILING DATE: 14-MAY-1992
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1992-02-19
NUMBER OF SEQ ID NOS: 18
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                    TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1995-06-07
PRIOR APPLICATION NUMBER: US 08/247,530
PRIOR FILING DATE: 1994-05-23
PRIOR APPLICATION NUMBER: US 07/838,607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE: OTHER INFORMATION: Synthetically derived DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                              NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE DOCKET NUMBER: 209
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Los Angeles
STATE: California
                                                                                  STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                      TYPE:
                                                                                                                                   LENGTH:
                                                                                                                                                                                                  TELEPHONE: (213) 489-16
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76 TTATACCAGCAT 87
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                                                                                                                   nucleic acid
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               9.0%;
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METHOD AND REAGENT FOR INHIBITING HEPATITIS C VIRUS REPLICATION
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100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                       07/882,888
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; Score 11.8; Di
; Pred. No. 15;
0; Mismatches
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12;
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                                 1; Length 15;
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104 GCAGATAAATGCCTA 118

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US-09-064-156A-491/c
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US-08-774-306A-491/c
                                                                                                                                                                                                                                                                                                                                                                       US-08-774-306A-491
               GENERAL INFORMATION:
APPLICANT: Draper, K
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                          Sequence 491, Application US/09064156A Patent No. 6132966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 491, Applica Patent No. 5869253 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                               Matches
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/774,306A
FILING DATE: December 26, 1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/182,968
APPLICATION NUMBER: 08/182,968
FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:
NUMBER: 1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                Query Match
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CITY: LOS Angeles
CTATE: California
" S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 23,227
REFERENCE/DOCKET NUMBER: 223,227
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: METHOD AND REAGENTITLE OF INVENTION: INHIBITING HEPATITITLE OF INVENTION: VIRUS REPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (441, TELEFAX: 67-3510
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                 Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
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                                                                                                                                                                                                                                                                                               Similarity 86.
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SEQUENCES:
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633 West Fifth Street
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METHOD AND REAGENT FOR
INHIBITING HEPATITIS C
                 Kenneth G.

METHOD AND REAGENT FOR INHIBITING HEPATITIS C VIRUS REPLICATION
                                                                                                                                                                                                                                                                                               9.0%; Score 11.8; I
86.7%; Pred. No. 15;
tive 0; Mismatches
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; ORGANISM: Homo sapiens US-09-081-646-677
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                                                    NUMBER OF SEQ ID NOS: 871
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 677
LENGTH: 15
                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                  Sequence 677, Application US/09081646 Patent No. 6333152
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Best Local Similarity
                                                                                                                            TITLE OF INVENTION: Gene Expression Profiles in No. TITLE OF INVENTION: Cancer Cells FILE REFERENCE: 01107.74664 CURRENT APPLICATION NUMBER: US/09/081,646 CURRENT FILLING DATE: 1998-05-20 EARLIER APPLICATION NUMBER: 60/047,352 EARLIER FILING DATE: 1997-05-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: December 26, 1996
APPLICATION NUMBER: 08/182,968
FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 234/083
                                                                                                                                                                                                                                                                  APPLICANT: Kinzler, Kenneth
APPLICANT: Vogelstein, Bert
APPLICANT: Zhang, Lin
APPLICANT: Zhou, Wei
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INFORMATION FOR SEQ ID NO:
                                      TYPE: DNA
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APPLICATION NUMBER: US/09/064,156A
FILING DATE: April 21, 1998
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
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STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (213) 955-0440
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OPERATING SYSTEM:
SOFTWARE: Word Pe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        104 GCAGATAAATGCCTA 118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15 GCAGGTAGATGCCTA 1
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86.7%; Pred. No. 15;
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DB 1;

Length 15;

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                                                               Best Loc
Matches
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Best Local Similarity
                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/291,93
PILING DATE: August 15, 1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA: including
PRIOR APPLICATION DATA: described
APPLICATION NUMBER: 08/245,466
PILING DATE: May 18, 1994
APPLICATION NUMBER: 07/987,132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 2010
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEPAX: (213) 955-0440
                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: RIBOZYME TREATMENT OF TITLE OF INVENTION: DISEASES OR CONDITIONS TITLE OF INVENTION: NF-KB
                                                                                                                                                                                                                                                                                                                                   PILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 633 West Fifth Street
STREET: Edite 4700
CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188, Application US/08291932A
o. 5658780
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 14 CCTCTCTAGGAGA 2
                              48 CCTCTCTAGTAGA 60
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                                                              sh 8.7%; similarity 92.3%; 12; Conservative
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                                                                                                                                                                                                                                            67-3510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              McSwiggen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stinchcomb, Dan T. Draper, Kenneth G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 830
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                                                                                                                                                                                                                                                                                                                                                                                                                                        described
                                                                                                                                                                                                                                                                                                                                                                                                                                        including application described below:
                                                              Score 11.4; DI
Pred. No. 17;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                            DB 1; Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
                                                               1,
                                                               Indels
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                                                               Gaps
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RESULT 12

CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street

NUMBER OF SEQUENCES:

909

TITLE OF INVENTION: METHOD AND REAGENT FOR TITLE OF INVENTION: INHIBITING RESPIRATORY TITLE OF INVENTION: SYNCYTIAL VIRUS

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-334-847-90
                                                                                                                                                                                                                                                                       US-08-334-847-91/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 90,
Patent No. 5
                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                                            Sequence 91,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local (
                                                                  GENERAL INFORMATION:
APPLICANT: McSwig
APPLICANT: Draper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER FILING POLICY IS APPLICATION NUMBER OF THE PROPERTY OF THE PROPERTY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 20;
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/334,847
FILING DATE: No. 5693532ember 4, 1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: WOOLF, TOO
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: INHIBITING RESPIRATORY
TITLE OF INVENTION: SYNCYTIAL VIRUS
   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match 8.7%;
Local Similarity 92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Com
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Los Angeles
STATE: California
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STREET: Suite 4700
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                         15 TCTAGTAGACCAT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            52 TCTAGTAGACAAT 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90071-2066
                                                                                                                                                                                         1, Application US/08334847
5693532
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Pavco, Pam
Woolf, Tod
                                                                      Draper,
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                                                                                                          McSwiggen, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Draper,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
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                                                                          Kenneth
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Pred. No. 17
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Los Angeles California

Suite 4700

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US-08-585-684B-793/c
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TOPOLOGY:
US-08-334-847-91
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence '>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
             COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: FASTESSQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/585,684B
FILING DATE: January 16, 1996
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: WOR'D PERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/334,847
FILING DATE: NO. 5693532ember 4, 1:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 275:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: MCSWiggen, James
TITLE OF INVENTION: METHOD AND REAGENT FOR THE
TITLE OF INVENTION: INDUCTION OF GRAFT TOLERANCE
TITLE OF INVENTION: AND REVERSAL OF IMMUNE RESPONSES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 90071-2066
COMPUTER READABLE FORM:
NEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 209/032
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                          CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                             STREET: 633 West Fifth Street
STREET: Suite 4700
APPLICATION NUMBER:
                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             793, Application US/08585684B
5. 5877021
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 TCTAGTAGACCAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stinchcomb, Daniel T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jarvis, Thale
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Pred. No. 17;
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
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ZIP: 90071

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb

MEDIUM TYPE: 500 Diskette, 1.44 Mb

MEDIUM TYPE: 500 DISKETTO, 1.5

COMPUTER: 1BM Compatible
OPERATING SYSTEM: 1BM P.C. DOS 5.0

SOFTWARE: FASTSEQ Version 1.5

CURRENT APPLICATION DATA:
APPLICATION NUMBER: 05/08/585,684B

FILING DATE: January 16, 1996

PRIOR APPLICATION NUMBER: 60/000,951

FILING DATE: July 7, 1995

ATTORNEY/AGENT INFORMATION:
NAME: WAIDLES, 1800 ARTS 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
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US-08-585-684B-794/c
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Best Local (
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                                                                                                                    TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Jarvis, The APPLICANT: McSwiggen, TITLE OF INVENTION: MITTLE OF INVENTION: MITTLE OF INVENTION: MUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: JULY 7, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
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STRANDEDNESS: single
TOPOLOGY: linear
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Local Similarity 92.3%;
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Lyon & Lyon STREET: 633 West Fifth Street STREET: Suite 4700
                        STRANDEDNESS: single
                                                                 TYPE:
                                                                                                                                                                                                                        TELEPHONE: (213) 489-160
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (213) 955-0440
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                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 794, Application US/08585684B
5. 5877021
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                                                      nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stinchcomb, Daniel T.
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linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32,327
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US-09-038-073-793/c
                                                         RESULT 17
US-09-038-073-794/c
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         Sequence 794, Application US/09038073
Patent No. 6194150
GENERAL INFORMATION:
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PILING DATE:
PILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 218/078
TELECOMMUNICATION INFORMATION:
"""". RPHONE: (213) 489-1600
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Best Local Similarity
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Best Local Similarity
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tent No. 6194150
                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS
LENGTH: 15 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/585,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: PastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/038,073
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
TITLE OF INVENTION:
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ADDRESSEE: Lyon & Lyon
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STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 633 West Fifth Street STREET: Suite 4700
                                                                                                                                                                                                                                                    STRANDEDNESS: single TOPOLOGY: linear
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Stinchcomb,
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92.3%;
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92.3%;
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Pred. No. 17;
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Pred. No. 17;
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                                                       APPLICANT: Zhang, Lin
APPLICANT: Zhou, wei
APPLICANT: Zhou, wei
APPLICANT: Zhou, wei
TITLE OF INVENTION: Gene Expression Profiles in No. 6333152mal and
TITLE OF INVENTION: Cancer Cells
TITLE REFERENCE: 01107.74664
CURRENT APPLICATION NUMBER: US/09/081,646
CURRENT FILING DATE: 1998-05-20
EARLIER APPLICATION NUMBER: 60/047,352
EARLIER FILING DATE: 1997-05-21
NUMBER OF SEQ ID NOS: 871
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 662
                                                                                                                                                                                                                                                                                          Sequence 662, Application US/09081646
Patent No. 6333152
GENERAL INFORMATION:
APPLICANT: Kinzler, Kenneth
APPLICANT: Vogelstein, Bert
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Best Local (
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TITLE OF INVENTION: 1
TITLE OF INVENTION: 1
TYPE: DNA
ORGANISM: Homo sapiens
                                        ENGTH: 15
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEPAX: (213) 955-0440
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ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/038,
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MEDIUM TYPE: 3.5" Diskette, 1.44
MEDIUM TYPE: storage
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PRIOR APPLICATION DATA:
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TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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SOFTWARE: FastSEC
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STREET: 633 West Fifth
STREET: Suite 4700
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Local Similarity 92.3%;
les 12; Conservative
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STATE: California
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Pred. No. 17;
0; Mismatches
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; Sequence 7, Application US/08379079
               RESULT 20
US-08-379-079-7
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US-08-453-224-7
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                                                                                                                       Query Match
Best Local Similarity 71.2
Best Local Similarity 71.2
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Best Local Similarity
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ve:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/453,224
FILING DATE: 30-MAY-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US/08/379,079
APPLICATION DATA:
105/08/379,079
FILING DATE: 26-JAN-1995
FILING DATE: 26-JAN-1995
FILING DATE: 26-JAN-1995
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TELEX: 575102
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TITLE OF INVENTION: Antisense Oligonuclectides Which Combat
TITLE OF INVENTION: Aberrant Splicing and Methods of Using the Same
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                                                                                                                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: 919-881-3140
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                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Sibley, Kenneth D.
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5470-63
                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
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                                                                                                                115 CCTAACGACTATCC 128
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: No. 5627274th Carolina
RY: U.S.A.
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Pred. No. 1
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                                                                                                                                                                                                                                                   Sequence 7, Applic Patent No. 5916808
                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Kole, Ryszard
APPLICANT: Dominski, Zbigniew T.
APPLICANT: Dominski, Zbigniew T.
TITLE OF INVENTION: Aberrant Splicing and Methods of Using the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Kole, Ryszard
APPLICANT: Dominski, Zbigniew T.
APPLICANT: Dominski, Zbigniew T.
TITLE OF INVENTION: Antisense Oligonucleotides Which Combat
TITLE OF INVENTION: Aberrant Splicing and Methods of Using the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 575102
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/062
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Sibley, Kenneth D.
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5470
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
                                                                                               ADDRESSEB: Kenneth D. Sibley; Bell, Seltzer, Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/379,079
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MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
                                                                                                                                                   NUMBER OF SEQUENCES:
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COMPUTER READABLE FORM:
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STATE: No. 5665593th Carolina
                               COUNTRY:
                                               STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 71.4 es 10; Conservative
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ADDRESSEE: Gibson
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                                                                                                                                                                                                                                                                      Application US/08802384
                                               No. 5916808th Carolina
                                                                                 Post Office Drawer 34009
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Pred. No. 18;
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MEDIUM TYPE:

Floppy disk

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RESULT 22
US-09-302-390-7
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Best Local Similarity
Matches 10; Conser
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APPLICANT: Kole, Ryszard
APPLICANT: Dominski, Zbigniew T.
APPLICANT: Dominski, Zbigniew T.
TITLE OF INVENTION: Aberrant Splicing and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 575102
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTURNEY...

NAME: Sibley, Kenneth
REGISTRATION NUMBER: 31,665
REGISTRATION NUMBER: 5470
REFERENCE/DOCKET NUMBER: 5470
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 119-881-3140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        quence 7, Application US/09302390 tent No. 5976879
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LENGTH: 14 base pairs
TYPE: nucleic acid
                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                  CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/379,079
FILING DATE:
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CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/802,384
FILING DATE:
                ATTORNEY/AGENT INFORMATION: NAME: Sibley, Kenneth D
                                                                                                                                                                                                                                                              STREET: POBLE CITY: Charlotte
CTATE: No. 597879th Carolina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 919-01:3175
                                                                                                                      APPLICATION NUMBER: US/09/302,390 FILING DATE:
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NAME: Sibley, Kennet REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/062,471
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ADDRESSEE: Gibson
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              Kenneth
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 31,665
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; ANTI-SENSE: YES
PCT-US94-05181-7
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SEQUENCE CHARACTERISTICS:
LENGTH: 14 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCT-US94-05181-7
                                                                                                                                                                                                                                                                                                                                                               COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/05107
FILING DATE:
CLASSITETION NUMBER: PCT/US94/05107
                               Query Match 8.3
Best Local Similarity 71.4
Matches 10; Conservative
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Best Local Similarity
                                                                                                                                                                                                                     TELEX: 575102
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                  CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: Sibley, Kenneth D
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5470
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 14 base pairs
                                                                                                                                 TYPE: HACE STRANDEDNESS: 81n
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TITLE OF INVENTION: Antisense Oligonucleotides which
TITLE OF INVENTION: Combat Aberrant Splicing and Methods of Using the Same
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ANTI-SENSE: Y
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
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 115 CCTAACGACTATCC 128
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kenneth D. Sibley; Bell, Seltzer, Park
                                                                                                                         RNA (genomic)
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Pred. No. 18;
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                                                 Score 10.8;
Pred. No. 18;
                               Mismatches
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                                                              Length 14;
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RESULT 24
5171840-9/c
;Patent No. 5171840
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TITLE OF INVENTION: RECEPTOR PROTEIN FOR HUMAN B CELL
STIMULATORY FACTOR-2
, NUMBER OF SEQUENCES: 11
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/298,694
                                                                    US-08-520-194-6
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Best Local Similarity 91.7%;
Matches
              Query Match 7.6%;
Best Local Similarity 100.0%;
                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Fugit, Donna R.
REGISTRATION NUMBER: 32,135
REFERENCE/DOCKET NUMBER: P.:
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                   TOPOLOGY: li
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: AMPLIFICATION AND DETECTION OF TITLE OF INVENTION: MYCOBACTERIUM AVIUM COMPLEX SPECIES NUMBER OF SEQUENCES: 12
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                                                                                                                 LENGTH: 11 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/520,194 FILING DATE: CLASSIFICATION: 435
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CITY: Franklin Lakes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Richard J. Rodrick, Becton Dickinson and ADDRESSEE: Company STREET: 1 Becton Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 19-JAN-1989
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10; Conservative
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Nadeau, James G.
Dean, Cheryl H.
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                                                                                                     linear
                                                                                   DNA (genomic)
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0; Mismatches
                  Score 10;
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Pred. No. 1
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                  DB 1; Length 11; 17;
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 0; Indels
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Gaps
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59 GACAATCCCG 68

Query Match

Score 9.8;

DB 1;

Length 13;

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; INDIVIDUAL ISOLATE: US-08-259-148A-54
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                                                                                                                                                                                                        NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-0093.20
TELECOMMUNICATION INFORMATION:
TELEPKONE: (415) 324-080
TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 54:
                                                           MOLECULE TYPE:
HYPOTHETICAL: N
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Tam, Albert W. APPLICANT: Krawczynski, Krzysztof Z. APPLICANT: Yarbough, Patrice D. TITLE OF INVENTION: Hepatitis E Virus Vaccine and Method NUMBER OF SEQUENCES: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/259,148A
FILING DATE: 13-JUN-1994
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 336,672
FILING DATE: 11-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 208,997
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PRIOR APPLICATION UNMBER: US 336,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
                                       ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                          FILING DATE: 17-JUN-1988
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 05-APR-PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
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APPLICATION NUMBER: US 822,335
FILING DATE: 17-JAN-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Palo Alto
                                                                                                                                 STRANDEDNESS:
                                                                                                                                                   LENGTH: 13 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                  TOPOLOGY:
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Tam, Albert W.
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Bradley, Daniel W.
Twu, Jr-Shin
                                                                                                                  unknown
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                                                                                                DNA
                                                                                                                                     unknown
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                     DNA sequence, Fig.
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; ORIGINAL SOURCE:
; INDIVIDUAL ISOLATE:
US-07-876-941A-70
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                                                                                                                                                                                    APPLICATION NUMBER: US 367,486
PILING DATE: 16-JUNE-1989
PRIOR APPLICATION UNMBER: US 336,672
APPLICATION NUMBER: US 336,672
PILING DATE: 11-APRIL-1989
PRIOR APPLICATION NUMBER: US 208,997
PILING DATE: 17-JUNE-1988
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-0093.33
TELECOMMUNICATION: (415) 324-0860
TELEPHONE: (415) 324-0860
INFORMATION FOR SEQ ID NO: 70:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTMARE: PATENTIA Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/876,941A
FILING DATE: 01-MAY-1992
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 822,335
FILING DATE: 17-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION DATA:
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FILING DATE: 05-APRIL-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 420,921
FILING DATE: 13-OCTOBER-1989
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSE: Dehlinger & Associates
STREET: 350 Cambridge Avenue, Suite 250
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Hepatitis E Virus Peptide Antigen and TITLE OF INVENTION: Antibodies NUMBER OF SEQUENCES: 76
                                                               ANTI-SENSE: NO
                                                                                 TOPOLOGI.
MOLECULE TYPE: DN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 94306
                                                                                                                           STRANDEDNESS: unknown
TOPOLOGY: unknown
                                                                                                                                                                      LENGTH: 13 base pairs
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Bradley, Daniel W.
Tam, Albert W.
Mitchell, Carl
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                    DNA sequence, Fig. 7
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Search completed: December 9, 2004, 17:25:17 Job time : 1 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 14 summaries
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Maximum DB
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Perfect score:
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                                                                                                                                       US-09-883-119A-19
                                                                                                                                                      RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Result
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                                                                                                                                                                                                                                          0 0 0 0 0 0 0
Sequence 19, Application US/09883119A
Publication No. US20030104520A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: The University of Texas System Board of Regents
TITLE OF INVENTION: Regulatable, Catalytically Active Nucleic Acids
FILE REFERENCE: 119927-1050
CURRENT APPLICATION NUMBER: US/09/883,119A
CURRENT FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: 60/212,097
PRIOR FILING DATE: 2000-06-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.
                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
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Match Length DB
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131
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US-09-231-235-61

US-09-797-51BA-61

US-09-872-696A-61

US-09-883-119A-17

US-10-786-720-10954

US-10-786-720-10956

US-09-883-119A-19

US-10-317-80-16

US-09-813-119A-19

US-10-317-80-16

US-09-274-553D-513

US-10-329-674-138

US-10-339-674-138

US-10-339-674-138
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Sequence 16, Appl
Sequence 513, App
Sequence 513, App
Sequence 188, App
Sequence 1630, Ap
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Sequence 61, Appl
Sequence 61, Appl
Sequence 61, Appl
Sequence 17, Appl
Sequence 10954, A
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Query Match

58.0%;

Score 76;

DB 1;

Length 94;

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RESULT 2
US-09-231-235-61
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                                                                                                                                                                                 RESULT 4
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APPLICANT: Sauter, Sybille L.
APPLICANT: Hau, David
APPLICANT: Sheridan, Philip Lee
APPLICANT: Hardy, Steven
APPLICANT: DubenBky, Thomas
APPLICANT: Yee, Jiing-Kuan
                                                                                                                                                                                                                                                                                                                                                       Sequence 61, Application US/09797518A
Patent No. US20020068354A1
GENERAL INFORMATION:
APPLICANT: Johnston, Julie C.
APPLICANT: Sauter, Sybille L.
APPLICANT: Heu, David
APPLICANT: Sheridan, Philip Lee
                                                                                            Sequence 61, Application US/09872696A
Publication No. US20030104611A1
GENERAL INFORMATION:
APPLICANT: Johnston, Julie C.
APPLICANT: Sauter, Sybille L.
APPLICANT: Hau, David
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Matches 23
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Matches
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Patent No. US20020048805A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.0%; Pred. No. 0.026; Matches 76; Conservative 0; Mismatches
Query Match 23.
Best Local Similarity 67.
Matches 23; Conservative
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Best Local
                                               APPLICANT:
APPLICANT:
APPLICANT:
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Sheridan, Philip I
Hardy, Steven
Dubensky, Thomas
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                                               Yee,
                                                          Hardy, Steven
Dubensky, Thomas
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                                                                                   Sheridan, Philip Lee
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                                               Jiing-Kuan
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            23.5%;
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Pred. No. 2.9;
           Score 30.8;
Pred. No. 2.
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Pred. No. 2.9;
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Sequence 10956, Application US/10786720

Publication No. US20040191818A1

GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: O'Toole, Margot
APPLICANT: O'Toole, Margot
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOI
TITLE OF INVENTION: DISEASES
FILE REFERENCE: 031896-023000 (AM101331L)
CURRENT APPLICATION NUMBER: US/10/786,720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 10954, Application US/10786720
Publication No. US20040191818A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: O'Toole, Margot
APPLICANT: Liu, Wei
ITITLE OF INVENTION: COMPOSITIONS AND METHODS FOI
ITITLE OF INVENTION: DISEASES
FILE REFERENCE: 031895-023000 (AM101331L)
CURRENT APPLICATION NUMBER: US/10/786,720
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US-10-786-720-10954/c
RESULT 8
US-09-883-119A-19/c
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US-09-883-119A-17
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Best Local S
Matches 23
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Publication No. US20030104520A1
GENERAL INFORMATION:
APPLICANT: The University of Texas System Board of Regents
TITLE OF INVENTION: Regulatable, Catalytically Active Nucle
                                                                                                                                                         Query Match
Best Local Similarity
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Best Local :
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CURRENT APPLICATION NUMBER: US/09/883,119A
CURRENT FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: 60/212,097
PRIOR FILING DATE: 2000-06-15
                                                                                        82 CAGCATCGTCTTGATGCCCTT 102
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ilarity 85.7%;
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Pred. No. 11;
7; Mismatches
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Pred. No. 11;
0; Mismatches
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Pred. No. 6.1;
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Best Local S
Matches 12
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Best Local S
Matches 16
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Publication No. US20030104520A1
GENERAL INFORMATION:
APPLICANT: The University of Texas System Board of Regents
TITLE OF INVENTION: Regulatable, Catalytically Active Nucle
FILE REFERENCE: 119927-1050
CURRENT APPLICATION NUMBER: US/09/883,119A
CURRENT FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: 60/212,097
                                                                 Best Loc
Matches
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                                                                                                                                                                                                                                                                Sequence 513, Application US/09504231A Patent No. US20020013458A1
                                                                               Query Match
Best Local Similarity
                                                                                                                                APPLICANT: Macejak, Dennis
TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATED
TITLE OF INVENTION: HEPATITIS C VIRUS INFECTION
                                                                                                                                                                              APPLICANT: Blatt, Lawrence
APPLICANT: McSwiggen, James
APPLICANT: Roberts, Beth
APPLICANT: Pavco, Pamela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Chetverin, Alexander B.
APPLICANT: Kramer, Fred Russel
TITLE OF INVENTION: NOVEL OLIGONUCLEOTIDE ARRAYS AND THEIR USE FOR SORTING,
TITLE OF INVENTION: ISOLATING, SEQUENCING, AND MANIPULATING NUCLEIC ACIDS
FILE REFERENCE: 07763-004002
CURRENT APPLICATION NUMBER: US/10/331,780
CURRENT FILING DATE: 2002-12-31
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 15 GCAGGTAGATGCCTA 1
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ilarity 100.0%;
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Pred. No. 7.
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Pred. No. 16;
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; Sequence 513, Application US/09274553D ; Patent No. US20020082225A1 ; GENERAL INFORMATION:

APPLICANT: Blatt, Lawrence APPLICANT: McSwiggen, Jam

Blatt, McSwiggen, Jame McSwiggen, Jame

Pamela

APPLICANT: APPLICANT:

US-09-274-553D-513/c

RESULT 11

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RESULT 13
US-10-339-674-1630/c
US-10-339-674-1630, Application US/10339674

Sequence 1630, Application US/10339674

Publication No. US20030204318A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL OF INVENTION: Bescherichia coli K-12 MG1655 complete genome.
FIITLE OF INVENTION: Bescherichia coli K-12 MG1655 complete genome.
FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
CURRENT APPLICATION NUMBER: US/10/339,674
CURRENT FILING DATE: 2003-06-06

NUMBER OF SEQ ID NOS: 3537
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US-10-056-414-188/c
US-10-056-414-188/c
; Sequence 188, Application US/10056414
; Publication No. US20030003469A1
; GENERAL INFORMATION:
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US-10-440-850-368/c
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                                                                      Sequence 368, Application US/10440850
Publication No. US20030207837A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
APPLICANT: Stinchcomb, Dan
APPLICANT: Jarvis, Thale
APPLICANT: McSwiggen, Jim
APPLICANT: McSwiggen, Jim
TITLE OF INVENTION: Method and Reagent for the Induction of Graft Tolerance and Rever
FILE REFERENCE: 250/130 (MBHB00-900-A)
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Best Local Similarity 92.3%;
Matches 12; Conservative
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Best Local Similarity 86.7%;
Matches 13; Conservative
 Query Match 8.7%;
Best Local Similarity 92.3%;
Matches 12; Conservative
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TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
TITLE OF INVENTION: HEPATITIS C VIRUS INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Proprietary
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Draper, Kenneth G.
MCSwiggen, James
TITLE OF INVENTION: RIBOZYME TREATMENT OF
DISEASES OR CONDITIONS
RELATED TO LEVELS OF
                                                                                                                                                                                                                                                                                                                                                                 107 GATAAATGCCTAA 119
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; Score 11.4; D
; Pred. No. 16;
0; Mismatches
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Pred. No. 16;
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AX590751
DOGSCN4AB
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AX635705
AR261549
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AX729684
AX736832
AX758557
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AX826473
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AR132368
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ACCESSION: AR343402
ACCESSION: AX034867
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                                                                                                                                     ACCESSION: AR033725
ACCESSION: AR113547
                                                                                                                                                                ACCESSION: AX635705
ACCESSION: AR261549
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                                                                                                                                                                                                         ACCESSION: AX758557
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ACCESSION: AX255681
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ACCESSION: AX590751
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ACCESSION: I30287
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Test system
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Sequence 1 :
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AVENTIS RESEARCH AND TECHNOLOGIES GMBH AND CO KG

OS Artificial Sequence
PN JP 2002537822-A/1
PD 12-NOV-2002
PF 25-FEB-2000 JP 2000602811
PR 02-MAR-1999 DE 199 09 156.0
PR 02-MAR-1999 DE 199 09 156.0
PI CHRISTOPH HULS, BETTINA BAUER, CLAUS SIMANDI, REINHARD LUEHRMANN, PI TILMANN ACHSEL, HANS PETER VORNLOCHER
PC C12N15/09, C12Q1/68, G01N33/53, G01N33/566, G01N33/58, C12N15/00 CC
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1 (bases 1 to 40)
Huls,C., Bauer,B., Simandi,C., Luehrmann,R.,
                                                                                         Huls,C., Bauer,B., Simandi,C., Luhrmann,R., Achsel,T. Vornlocher,H.-P.
Test system for detecting a splicing reaction and use Patent: US 657961-A 1 17-JUN-2003;
Location/Qualifiers
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/mol_type="genomic RNA"
/db_xref="taxon:32630"
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Location/Qualifiers
                                                    /organism="unknown"
/mol_type="unassigned
                                                                                                                                                                                                                                                                from patent US
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  Score 31.8; D
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ACCESSION: AX638103
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                       Sequence
I30287
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                                                                                                                                                                                                                                  1 (bases 1 to 42)
Polisky, B., Jenison, R.D. and Gold, L.
High-affinity nucleic acid ligands that
theophylline and caffeine
Patent: US 5580737-A 29 03-DEC-1996;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                     Unknown.
Unknown.
         I30287.1 GI:1821078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent: DE 19909156-A 1 07-SEP-2000;
AVENTIS RES & TECH GMBH & CO (DE)
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Sequence 1 from Patent DE19909156.
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29 from patent US 5580737.
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/mol_type="unassigned RNA"
/db_xref="taxon:32630"
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US 5580737.
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                                                  Ellington,A.D., Hesselberth,J., Marshall,K., Rob
Sooter,L., Davidson,E., Cox,J.C. and Reidel,T.
Regulatable, catalytically active nucleic acids
Patent: WO 0196559-A 18 20-DEC-2001;
Board of Regents, The University of Texas Systen
Location/Qualifiers
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Polisky,B., Jenison,R.D. and Gold,L.
High-affinity nucleic acid ligands that
theophylline and caffeine
Patent: US 5580737-A 6 03-DEC-1996;
Location/Qualifiers
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Sequence 6 from patent US 5580737.
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130256.1 GI:1821047
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Polisky, B., Jenison, R.D. and Gold, L.
High-affinity nucleic acid ligands that
theophylline and caffeine
Patent: US 5580737, A 37 03-DEC-1996;
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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/mol_type="unassigned DNA"
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DOGSCN4AB
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                                                                                                                       application to the canine genome (1996) Unpublished (1996) Original source text: Canis familiaris DNA. Gene-specific universal mammalian sequence-tagged site for SCN4A. Primer for the 3' end is in exon 24. Human product is 1177 bp. Canine product is 1100 bp. PCR conditions: 1 min, 94 C, 2 min, 57 C, 3 min, 72 C, 35 cycles.
                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

1 (bases 1 to 20)

Venta, P.J., Brouillette, J.A., Yuzbasiyan-Gurkan, V. and Brewer, G.J. Gene, specific universal mammalian sequence-tagged sites:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 191 from Patent AX590751 AX590751.1 GI:27949300
                                                                                                                                                                                                                                                                                                                 Canis familiaris (dog)
Canis familiaris
                                                                                                                                                                                                                                                                                                                                            L77475.1 GI:1261762
STS; PCR identification; PCR primer; sequence tagged
muscle sodium channel; universal mammalian STS.
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                                       /db_x
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/db_xref="taxon:32630"
                                             /organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="taxon:9615"
                                                                                                          Location/Qualifiers
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/note="PCR primer binding site"
/evidence=experimental
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Pred. No. 13;
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Pred. No. 3
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AX705643
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Best Local Similarity
Matches 15; Conservat
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                                                                                                                                                                       Distler, J., Model, F. and Taubert, H. Method and nucleic acids for the analysis Patent: WO 03014388-A 312 20-FEB-2003;
                                                                                                                                                                                                                                  synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                  Sequence 312 from Patent AX705643
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
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                                                                                         /organism="synthetic construct"
/mol type="unassigned DNA"
/mb xref="taxon:32630"
/mbe="Detection oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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RESULT 12

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RESULT 14
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AX826473
                               Sequence
AX255681
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Ax822833
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Method and nucleic acids for the analy,
proliferactive disorder
Patent: WO 03072821-A 725 04-SEP-2003;
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synthetic construct
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                                           102 from Patent
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/db_xref="taxon:32630"
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/db_xref="taxon:32630"
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                     GI:16074736
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Pred. No. 18;
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AX674315/c
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AX729684/c
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AX674315
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Sequence 1318 from Pate:
AX729684
AX729684.1 GI:30509027
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Patent:
           medicines
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                                 Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use
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Location/Qualifiers
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Patent: WO 0170982-A 102 27-SEP-2001;
Immusol Incorporated (US) ; Beger, Carmela
Location/Qualifiers
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Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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WO 03025175-A 1318
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/mol_type="unassigned DNJ
/db_xref="taxon:9606"
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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Patent: WO 03025177-A 2422 27-MAR-2003;
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Sequence 2422 from Patent
AX736832
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Location/Qualifiers
                                                           Patent: WO 03040369-A 1878 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                       Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral revisitance phenomena and their use as medicines
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Location/Qualifiers
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
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Sequence
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Sullivan,S., Draper,K.G., McSwiggen,J. and
IL-5 targeted ribozymes
Patent: US 5616488-A 449 01-APR-1997;
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Sequence 449 from patent US
I39411
                                                                                                                                                                                                          Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                   Patent: EP 1260586-A 2844 27-NOV-2002; RIBOZYME PHARMACEUTICALS, INC. (US)
                                                                                                                                                                                                                                                                                   unidentified
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                                                                                        /organism="unidentified"
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Method and reagent for inhibiting hepatitis C virus replication Method and $869253-A 491 09-FEB-1999;

Patent: US 5869253-A 491 09-FEB-1999;

Location/Qualifiers
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               1 (bases 1 to 15)
Draper, K.G.
Method and reagent for inhibiting hepatitis C virus replication
Patent: US 6132966-A 491 17-OCT-2000;
Location/Qualifiers
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Chetverin, A.B. and Kramer, F.R.
Oligonucleotide arrays and their use for sorting, sequencing, and manipulating nucleic acids patent: US 6322971-A 16 27-NOV-2001;
Location/Qualifiers
                                                                            Unknown.
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/mol_type="unassigned DNA" 9.0%; Score 11.8; DB 1; Length 15;

Query Match
Best Local Similarity
Matches 13; Conserv Query Match 9.0%; Best Local Similarity 86.7%; 104 GCAGATAAATGCCTA 118 104 GCAGATAAATGCCTA 118 Sequence 491 from patent US 5 Enzymatic nucleic acid treatment of to hepatitis C virus infection. BD207458 BD207458.1 GI:33017228 JP 2002512791-A/1048. PF 26-APR-1999 JP 2000545991 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI LAWRENCE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A I57954.1 BD207458 GCAGGTAGATGCCTA 1 GCAGGTAGATGCCTA 1 9.0%; nilarity 86.7%; Conservative hepatitis C virus infection. Key Enzymatic nucleic acid treatment related to C12N15/00 C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,A61K37/66, Conservative DENNIS MACEJAK /organism="unidentified' /mol_type="genomic RNA" /db_xref="taxon:32644" Location/Qualifiers GI:2483018 /organism='Hepatitis virus (hepatitis virus)'. 0; 0; Score 11.8; Pred. No. 23; Location/Qualifiers Score 11.8; Pred. No. 23; Mismatches Mismatches 15 .5 bp Di 3 5610054. đđ DNA DB RNA linear PAT 17-JUL-2003 얁 1; 2; 2 diseases Length Indels linear 15; e PAT 0 conditions 0, Gaps Gaps a PI Ę 0 റ്റ 0

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1 (bases 1 to 15)
1 (bases 1, Jarvis, T. and McSwiggen, J. Stinchcomb, D.T., Jarvis, T. and McSwiggen, J. Nucleic acid based inhibition of CD40
Nucleic acid based inhibition of CD40
L Patent: US 6194150-A 793 27-FEB-2001;
L Patent Location/Qualifiers
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              87 TCGTCTTGATGCC 99
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Vogelstein,B., Kinzler,K.W., Zhang,L. a
Gene expression profiles in normal and
Patent: US 6333152-A 677 25-DEC-2001;
Location/Qualifiers
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Unclassified.
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Enzymatic RNA molecule targeted against Hepatitis
Patent: US 5610054-A 491 11-WAR-1997;
Location/Qualifiers
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AR132369
                                1 (bases 1 to 15)

McSwiggen, J., Draper, K., Pavco, P. and Woolf, T.

Respiratory syncytial virus ribozymes

Patent: US 5693532-A 90 02-DEC-1997;
                                                                                                                                    177383
Sequence 90 from
177383
                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 15)
Stinchcomb, D.T., Draper, K.G. and McSwiggen, J.
Rel a targeted ribozymes
Patent: US 5658780-A 188 19-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 15)
Stinchcomb, D.T., Jarvis, T. and McSwiggen, J.
Nucleic acid based inhibition of CD40
Patent: US 6194150-A 794 27-FEB-2001;
Location/Qualifiers
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794 from patent US 6
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Pred. No. 25;
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KEYWORDS
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ACCESSION
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AX636020/c
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FEATURES
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AR180594/c
LOCUS
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AUTHORS
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Matches 12; Conserv
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Sequence 3159 from Patent
AX636020
AX636020.1 GI:28471634
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177384
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Gene expression profiles in normal and
Patent: US 6333152-A 662 25-DEC-2001;
Location/Qualifiers
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McSwiggen,J., Draper,K., Pavco,P. and
McSwiggen,J., Draper,K., Pavco,P. and
Respiratory syncytial virus ribozymes
Patent: US 5693532-A 91 02-DEC-1997;
Location/Qualifiers
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Similarity 92.3%;
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662 from patent US 6
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Pred. No. 25
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Pred. No. 25
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RESULT 35
AX638103/c
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AX638102/c
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                                          AX638103
Sequence 5242 from Patent
AX638103
AX638103.1 GI:28473717
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12;
unidentified unidentified
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Sequence 5241 from Patent
AX638102
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RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
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AUTHORS
Search completed: December 9, 2004, 17:19:02 Job time : 1 secs
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Patent: EP 1260586-A 5242 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
LOCATION/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                       Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and Woolf, T.
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Sequence 102, Application US/10239958
GENERAL INFORMATION:
APPLICANT: BARBER, JACK
APPLICANT: WONG-STAAL, FLOSSIE
TITLE OF INVENTION: BRCA-1 REGULATORS AND ME
FILE REFERENCE: 039316/0603
CURRENT APPLICATION NUMBER: US/10/239,958
CURRENT FILING DATE: 2002-09-23
PRIOR APPLICATION NUMBER: 09/536,058
PRIOR FILING DATE: 2000-03-23
NUMBER OF SEQ ID NOS: 256
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 102
LENGTH: 16
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No.
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Maximum Match 100%
Listing first 6 summaries
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Maximum DB
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; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: oligonucleotide
US-10-239-958-102
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Perfect score:
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                                                         ORGANISM: Artificial Sequence FEATURE:
                                                                                               TYPE: DNA
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length: 100
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131
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US-10-964-195-5
US-60-522-459-11465
US-60-522-459-9037
US-60-522-459-9179
US-60-522-459-12497
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Sequence 5, Appli
Sequence 11465, A
Sequence 9037, Ap
Sequence 9179, Ap
Sequence 12497, A
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Query Match
Best Local Similarity
Matches 5; Conserve
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US-60-522-459-11465
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US-60-522-459-11465
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                                                                                                                                                    Sequence 11465, Application US/60522459

SEQUENCE INFORMATION:
APPLICANT: ROSETTA GENOMICS LTD
TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY VIRAL AND
TITLE OF INVENTION: VIRAL ASSOCIATED OLIGONUCLEOTIDES AND USES THEREOF
FILE REFERENCE: 52904
CURRENT APPLICATION NUMBER: US/60/522,459
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 15575
SOFTWARE: PALEOTIN VERSION 3.2
SEQ ID NO 11465
LENGTH: 13
TYPE: RNA. UNTER-
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SEQ ID NO 5
LENGTH: 15
TYPE: DNA
ORGANISM: Artificial Sequence
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GENERAL INFORMATION:
APPLICANT: Rosenblum et al.
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Best Local Similarity
Matches 14; Conserv
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Best Local 9
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CURRENT FILING DATE: 2004-10-13
PRIOR APPLICATION NUMBER: US/09/320,156
PRIOR FILING DATE: 1999-05-26
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TITLE OF INVENTION: Related Surface Antigens
FILE REFERENCE: D5425CIP2
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Local Similarity 86.7%;
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Pred. No. 0
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Pred. No. 2
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RESULT 4 US-60-522-459-9037 ; Sequence 9037, Appl

Application US/60522459

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RESULT 5

US-60-522-459-9179/c

Sequence 9179, Application US/60522459

SEQUENCE 9179, Application US/60522459

GENERAL INFORMATION:

APPLICANT: ROSETTA GENOMICS LTD

TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY VIRAL AND

TITLE OF INVENTION: VIRAL ASSOCIATED OLIGONUCLECTIDES AND USES THEREOF

FILE REFERENCE: 52904

CURRENT APPLICATION NUMBER: US/60/522,459

CURRENT APPLICATION NUMBER: US/60/522,459

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 15575

SOFTWARE: Patentin version 3.2

SOFTWARE: Patentin version 3.2

TYPE: RNA

ORGANISM: Human

ORGANISM: Human
                                                                                           ; ORGANISM: Human herpesvirus 2 US-60-522-459-12497
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Best Local S
Matches 11
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TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY VIRAL .

TITLE OF INVENTION: VIRAL ASSOCIATED OLIGONUCLEOTIDES AND USES THEREOF

FILE REFERENCE: 52904

CURRENT FILIG 2004-10-04

NUMBER OF SEQ ID NOS: 15575

SOPTWARE: PACENTION VERSION 3.2

SEQ ID NO 9037

LENGTH: 13

TYPE: RNA. Three.
Query Match 7.5%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 2.5; Matches 11; Conservative 0; Mismatches 2; Indels
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Best Local 9
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Local Similarity 84.6%;
1es 11; Conservation
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53.8%; Pred. No. 2.
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